

1.1 **Pollution Control Agency**

1.2 **Proposed Permanent Rules Relating to Water Use Classification**

1.3 **7050.0186 WETLAND STANDARDS AND MITIGATION.**

1.4 **Subpart 1. Policy and wetland beneficial uses.** It is the policy of the state to protect
1.5 wetlands and prevent significant adverse impacts on wetland beneficial uses caused by
1.6 chemical, physical, biological, or radiological changes. The quality of wetlands ~~shall~~ must
1.7 be maintained to permit the propagation and maintenance of a healthy community of aquatic
1.8 and terrestrial species indigenous to wetlands; preserve wildlife habitat, ~~and~~; support
1.9 biological diversity of the landscape; and be suitable for erosion control, groundwater
1.10 recharge, low flow augmentation, storm water retention, and stream sedimentation. In
1.11 addition, these waters ~~shall~~ must be suitable for boating and other forms of aquatic recreation
1.12 as specified in part 7050.0222, subpart 6; general industrial use as specified in part 7050.0223,
1.13 subpart ~~5~~ 2; irrigation; and use by wildlife and livestock, ~~erosion control, groundwater~~
1.14 ~~recharge, low flow augmentation, storm water retention, and stream sedimentation~~ as
1.15 specified in part 7050.0224, ~~subpart 4~~ subparts 2 and 3; and aesthetic enjoyment as specified
1.16 in part 7050.0225, subpart 2.

1.17 *[For text of subparts 1a to 6, see Minnesota Rules]*

1.18 **7050.0210 GENERAL STANDARDS FOR WATERS OF THE STATE.**

1.19 *[For text of subparts 1 to 6c, see Minnesota Rules]*

1.20 **Subp. 7. Minimum stream flow.** Point and nonpoint sources of water pollution shall
1.21 be controlled so that the water quality standards will be maintained at all stream flows that
1.22 are equal to or greater than the $7Q_{10}$ for the critical month or months, unless another flow
1.23 condition is specifically stated as applicable in this chapter or chapter 7053.

1.24 *[For text of subparts 8 to 18, see Minnesota Rules]*

1.25 **7050.0218 FOR TOXIC POLLUTANTS: DEFINITIONS AND METHODS FOR**
1.26 **DETERMINATION OF HUMAN HEALTH-BASED NUMERIC STANDARDS AND**

2.1 **SITE-SPECIFIC NUMERIC CRITERIA FOR AQUATIC LIFE, HUMAN HEALTH,**
2.2 **AND FISH-EATING WILDLIFE.**

2.3 *[For text of subparts 1 to 3, see Minnesota Rules]*

2.4 **Subp. 4. Adoption of USEPA national criteria.** The USEPA establishes aquatic life
2.5 and human health-based criteria under section 304(a)(1) of the Clean Water Act, United
2.6 States Code, title 33, section 1314. The USEPA criteria, subject to modification as described
2.7 in this subpart, are applicable to class 2 waters of the state. The USEPA has described the
2.8 national methods for developing aquatic life criteria in "Guidelines for Deriving Numerical
2.9 National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses."

2.10 USEPA criteria that vary with an ambient water quality characteristic such as total
2.11 hardness or pH will be established for specific waters or reaches using data available to the
2.12 commissioner. Central values such as the means or medians for the characteristic will be
2.13 used unless there is evidence to support using different values. Values for water quality
2.14 characteristics can be estimated for specific waters or reaches that have no data by using
2.15 data from a nearby watershed with similar chemical properties.

2.16 A. The USEPA aquatic life criteria are adopted unchanged by the agency, unless
2.17 modified under item C, as the criteria applicable to designated class 2A waters in parts
2.18 7050.0420 and 7050.0470.

2.19 B. The USEPA criteria are adopted, subject to modification as described in this
2.20 item or item C, for application to cool and warm water habitats and wetlands. Cool and
2.21 warm water habitats (class 2Bd and 2B) are defined in part ~~7050.0430~~ 7050.0415 or listed
2.22 in part 7050.0470. Wetlands (class 2D) waters are defined in part ~~7050.0425~~ 7050.0415 or
2.23 listed in part 7050.0470.

2.24 *[For text of subitems (1) to (7), see Minnesota Rules]*

2.25 *[For text of item C, see Minnesota Rules]*

3.1 *[For text of subparts 5 to 10, see Minnesota Rules]*

3.2 **7050.0220 SPECIFIC WATER QUALITY STANDARDS BY ASSOCIATED USE
3.3 CLASSES.**

3.4 Subpart 1. **Purpose and scope.** The numeric and narrative water quality standards in
3.5 this chapter prescribe the qualities or properties of the waters of the state that are necessary
3.6 for the designated public uses and benefits. If the standards in this chapter are exceeded, it
3.7 is considered indicative of a polluted condition ~~which~~that is actually or potentially
3.8 deleterious, harmful, detrimental, or injurious with respect to designated uses or established
3.9 classes of the waters of the state.

3.10 All surface waters are protected for multiple beneficial uses. Numeric water quality
3.11 standards are tabulated in this part for all uses applicable to four common categories of
3.12 surface waters, so that all applicable standards for each category are listed together in
3.13 subparts 3a to 6a. The four categories are:

3.14 A. cold water aquatic life and habitat, also protected for drinking water: classes
3.15 1B; 2A, 2Ae, or 2Ag; ~~3A or 3B~~3; 4A and 4B; and 5 (subpart 3a);

3.16 B. cool and warm water aquatic life and habitat, also protected for drinking water:
3.17 classes 1B or 1C; 2Bd, 2Bde, 2Bdg, or 2Bdm; ~~3A or 3B~~3; 4A and 4B; and 5 (subpart 4a);

3.18 C. cool and warm water aquatic life and habitat and wetlands: classes 2B, 2Be,
3.19 2Bg, 2Bm, or 2D; ~~3A, 3B, 3C, or 3D~~3; 4A and 4B ~~or 4C~~; and 5 (subpart 5a); and

3.20 D. limited resource value waters: classes ~~3C~~3; 4A and 4B; 5; and 7 (subpart 6a).

3.21 Subp. 2. **Explanation of tables.**

3.22 *[For text of items A to C, see Minnesota Rules]*

3.23 D. The tables of standards in subparts 3a to 6a include the following abbreviations
3.24 and acronyms:

4.1	AN	means aesthetic enjoyment and navigation, class 5 waters
4.2	*	an asterisk following the FAV and MS values or double dashes (--) means part 7050.0222, subpart 7, item G, applies
4.4	(c)	means the chemical is assumed to be a human carcinogen
4.5	CS	means chronic standard, defined in part 7050.0218, subpart 3
4.6	DC	means domestic consumption (drinking water), class 1 waters
4.7	--	double dashes means there is no standard
4.8	exp. ()	means the natural antilogarithm (base e) of the expression in parenthesis
4.9	FAV	means final acute value, defined in part 7050.0218, subpart 3
4.10	I _C	means industrial consumption, class 3 waters
4.11	IR	means agriculture irrigation use, class 4A waters
4.12	LS	means agriculture livestock and wildlife use, class 4B waters
4.13	MS	means maximum standard, defined in part 7050.0218, subpart 3
4.14	NA	means not applicable
4.15	(S)	means the associated value is a secondary drinking water standard
4.16	su	means standard unit. It is the reporting unit for pH
4.17	TH	means total hardness in mg/L, which is the sum of the calcium and magnesium concentrations expressed as CaCO ₃
4.19	TON	means threshold odor number

[For text of item E, see Minnesota Rules]

4.21 F. When two or more use classes have standards for the same pollutant, the most
4.22 stringent standard applies pursuant to part 7050.0450. All surface waters are protected for
4.23 ~~class classes 3 and 6, but this class has these classes have~~ no numeric standards so it is they
4.24 ~~are~~ not included in the tables.

4.25 G. Certain waters are protected for wild rice, and a numeric standard for sulfates
4.26 applies according to part 7050.0224, subpart 2.

[For text of subpart 3, see Minnesota Rules]

5.1 Subp. 3a. **Cold water aquatic life and habitat, drinking water, and associated use**
 5.2 **classes.** Water quality standards applicable to use classes 1B; 2A, 2Ae, or 2Ag; **3A or 3B**
 5.3 **3;** 4A and 4B; and 5 surface waters. The water quality standards in part 7050.0222, subpart
 5.4 2, that apply to class 2A also apply to classes 2Ae and 2Ag. In addition to the water quality
 5.5 standards in part 7050.0222, subpart 2, the biological criteria defined in part 7050.0222,
 5.6 subpart 2d, apply to classes 2Ae and 2Ag.

5.7 A. MISCELLANEOUS SUBSTANCE, CHARACTERISTIC, OR POLLUTANT

	2A CS	2A MS	2A FAV	1B DC	3A/3B I_E	4A IR	4B HR LS	5 AN
--	------------------------	------------------------	-------------------------	------------------------	--------------------------------------	------------------------	---------------------------	-----------------------

5.10

5.11 (1) Ammonia, un-ionized as N, µg/L

5.12	16	--	--	--	--	--	--	--
------	----	----	----	----	----	----	----	----

5.13 (2) Asbestos, >10 µm (c), fibers/L

5.14	--	--	--	7.0e+06	--	--	--	--
------	----	----	----	---------	----	----	----	----

5.15 (3) Bicarbonates (HCO_3), meq/L

5.16	--	--	--	--	--	5	--	--
------	----	----	----	----	----	---	----	----

5.17 (4)(3) Bromate, µg/L

5.18	--	--	--	10	--	--	--	--
------	----	----	----	----	----	----	----	----

5.19 (5)(4) Chloride, mg/L

5.20	230	860	1,720	250(S)	50/100	--	--	--
------	-----	-----	-------	--------	--------	----	----	----

	2A CS	2A MS	2A FAV	1B DC	3A/3B I_E	4A IR	4B HR LS	5 AN
--	------------------------	------------------------	-------------------------	------------------------	--------------------------------------	------------------------	---------------------------	-----------------------

5.23

5.24 (6)(5) Chlorine, total residual, µg/L

6.1	11	19	38	--	--	--	--	--
6.2	(7)(6) Chlorite, $\mu\text{g/L}$							
6.3	--	--	--	1,000	--	--	--	--
6.4	(8)(7) Color, Pt-Co							
6.5	30	--	--	15(S)	--	--	--	--
6.6	(9)(8) Cyanide, free, $\mu\text{g/L}$							
6.7	5.2	22	45	200	--	--	--	--
6.8	(10)(9) <i>Escherichia (E.) coli</i> bacteria, organisms/100 mL							
6.9	See item D	--	--	--	--	--	--	--
6.10								
6.11	2A	2A	2A	1B	3A/3B	4A	4B	5
6.12	CS	MS	FAV	DC	IC	IR	HR LS	AN
6.13								
6.14	(11)(10) Eutrophication standards for lakes and reservoirs (phosphorus, total, $\mu\text{g/L}$;							
6.15	chlorophyll-a, $\mu\text{g/L}$; Secchi disk transparency, meters)							
6.16	See part 7050.0222,	--	--	--	--	--	--	--
6.17	subparts 2							
6.18								
6.19	and 2a							
6.20	(12)(11) Eutrophication standards for rivers, streams, and navigational pools (phosphorus,							
6.21	total $\mu\text{g/L}$; chlorophyll-a (seston), $\mu\text{g/L}$; five-day biochemical oxygen demand (BOD_5),							
6.22	mg/L; diel dissolved oxygen flux, mg/L; chlorophyll-a (periphyton), mg/m^2)							
6.23	See part 7050.0222,	--	--	--	--	--	--	--
6.24	subparts 2							
6.25								
6.26	and 2b							
6.27	(13)(12) Fluoride, mg/L							

10/28/20

REVISOR

CKM/JK

RD4335

7.1	--	--	--	4	--	--	--	--
7.2	(14)	(13)	Fluoride, mg/L					
7.3	--	--	--	2(S)	--	--	--	--
7.4	(15)	(14)	Foaming agents, µg/L					
7.5	--	--	--	500(S)	--	--	--	--
7.6	(16)	Hardness, Ca+Mg as CaCO ₃ , mg/L						
7.7	--	--	--	--	50/250	--	--	--
7.8	2A	2A	2A	1B	3A/3B	4A	4B	5
7.9	CS	MS	FAV	DC	IIC	IR	HR LS	AN
7.10	<hr/>							
7.11	(17)	(15)	Hydrogen sulfide, mg/L					
7.12	--	--	--	--	--	--	--	0.02
7.13	(18)	(16)	Nitrate as N, mg/L					
7.14	--	--	--	10	--	--	--	--
7.15	(19)	(17)	Nitrite as N, mg/L					
7.16	--	--	--	1	--	--	--	--
7.17	(20)	(18)	Nitrate + Nitrite as N, mg/L					
7.18								
7.19	--	--	--	10	--	--	<u>100</u>	--
7.20	(21)	(19)	Odor, TON					
7.21	--	--	--	3(S)	--	--	--	--

8.1	2A	2A	2A	1B	3A/3B	4A	4B	5
8.2	CS	MS	FAV	DC	IC	IR	HR LS	AN

8.3

8.4 (22) (20) Oil, µg/L

8.5 500 5,000 10,000 -- -- -- -- --

8.6 (23) (21) Oxygen, dissolved, mg/L

8.7	7, as a	--	--	--	--	--	--	--
8.8	daily							
8.9	minimum							

8.10 (24) (22) pH minimum, su

8.11 6.5 -- -- 6.5(S) 6.5/6.0 6.0 6.0 6.0

8.12 (25) (23) pH maximum, su

8.13 8.5 -- -- 8.5(S) 8.5/9.0 8.5 9.0 9.0

8.14 (26) (24) Radioactive materials

8.15	See	--	--	See	--	See	See	--
8.16	item E			item E		item E	item E	

8.17	2A	2A	2A	1B	3A/3B	4A	4B	5
8.18	CS	MS	FAV	DC	IC	IR	HR LS	AN

8.19

8.20 (27) Salinity, total, mg/L

8.21 -- -- -- -- -- -- -- 1,000 --

8.22 (28) Sodium, meq/L

8.23	--	--	--	--	--	60% of	--	--
8.24						total		
8.25						eations		

9.1 ~~(29) Specific conductance at 25°C, $\mu\text{mhos}/\text{cm}$~~

9.2 -- -- -- -- -- -- 1,000 -- --

9.3 ~~(30) (25) Sulfate, mg/L~~

9.4 -- -- -- -- 250(S) -- -- -- 600 --

9.5 ~~(31) (26) Sulfates, wild rice present, mg/L~~

9.6 -- -- -- -- -- -- 10 -- --

9.7	2A	2A	2A	1B	3A/3B	4A	4B	5
9.8	CS	MS	FAV	DC	IE	IR	HR LS	AN

9.10 ~~(32) (27) Temperature, °F~~

9.11 No material -- -- -- -- -- -- -- --

9.12 increase ~~(33) Total dissolved salts, mg/L~~

9.13 -- -- -- -- -- -- 700 -- --

9.14 ~~(34) (28) Total dissolved solids, mg/L~~

9.15 -- -- -- -- -- -- -- --

9.16 ~~(35) (29) Total suspended solids (TSS), mg/L~~

9.17 -- -- -- -- 500(S) -- -- --

9.18 -- -- -- -- -- -- -- --

9.19 See part
7050.0222,
subpart 2

9.20 -- -- -- -- -- -- -- --

9.21 -- -- -- -- -- -- -- --

9.22 -- -- -- -- -- -- -- --

9.23 B. METALS AND ELEMENTS

10.1	2A	2A	2A	1B	3A/3B	4A	4B	5
10.2	CS	MS	FAV	DC	IC	IR	LS	AN

10.3

10.4 (1) Aluminum, total, µg/L

10.5	87	748	1,496	50-	--	--	--	--
10.6				200(S)				

10.7 (2) Antimony, total, µg/L

10.8	5.5	90	180	6	--	--	--	--
------	-----	----	-----	---	----	----	----	----

10.9 (3) Arsenic, total, µg/L

10.10	2.0	360	720	10	--	--	--	--
-------	-----	-----	-----	----	----	----	----	----

10.11 (4) Barium, total, µg/L

10.12	--	--	--	2,000	--	--	--	--
-------	----	----	----	-------	----	----	----	----

10.13 (5) Beryllium, total, µg/L

10.14	--	--	--	4.0	--	--	--	--
-------	----	----	----	-----	----	----	----	----

10.15	2A	2A	2A	1B	3A/3B	4A	4B	5
10.16	CS	MS	FAV	DC	IC	IR	LS	AN

10.17

10.18 (6) Boron, total, µg/L

10.19	--	--	--	--	--	500	--	--
-------	----	----	----	----	----	-----	----	----

10.20 (7) Cadmium, total, µg/L

10.21	1.1	3.9	7.8	5	--	--	--	--
-------	-----	-----	-----	---	----	----	----	----

10.22 Class 2A cadmium standards are hardness dependent. Cadmium values shown are for a
 10.23 total hardness of 100 mg/L only. See part 7050.0222, subpart 2, for examples at other
 10.24 hardness values and equations to calculate cadmium standards for any hardness value not
 10.25 to exceed 400 mg/L.

11.1 (8) Chromium +3, total, µg/L

11.2	207	1,737	3,469	--	--	--	--	--
------	-----	-------	-------	----	----	----	----	----

11.3 Class 2A trivalent chromium standards are hardness dependent. Chromium +3 values shown
 11.4 are for a total hardness of 100 mg/L only. See part 7050.0222, subpart 2, for examples at
 11.5 other hardness values and equations to calculate trivalent chromium standards for any
 11.6 hardness value not to exceed 400 mg/L.

11.7 (9) Chromium +6, total, µg/L

11.8	11	16	32	--	--	--	--	--
------	----	----	----	----	----	----	----	----

11.9 (10) Chromium, total, µg/L

11.10	--	--	--	100	--	--	--	--
-------	----	----	----	-----	----	----	----	----

11.11	2A	2A	2A	1B	3A/3B	4A	4B	5
11.12	CS	MS	FAV	DC	IE	IR	LS	AN

11.13

11.14 (11) Cobalt, total, µg/L

11.15	2.8	436	872	--	--	--	--	--
-------	-----	-----	-----	----	----	----	----	----

11.16 (12) Copper, total, µg/L

11.17	9.8	18	35	1,000	--	--	--	--
11.18				(S)				

11.19 Class 2A copper standards are hardness dependent. Copper values shown are for a total
 11.20 hardness of 100 mg/L only. See part 7050.0222, subpart 2, for examples at other hardness
 11.21 values and equations to calculate copper standards for any hardness value not to exceed 400
 11.22 mg/L.

11.23 (13) Iron, total, µg/L

11.24	--	--	--	300(S)	--	--	--	--
-------	----	----	----	--------	----	----	----	----

11.25 (14) Lead, total, µg/L

11.26	3.2	82	164	NA	--	--	--	--
-------	-----	----	-----	----	----	----	----	----

12.1 Class 2A lead standards are hardness dependent. Lead values shown are for a total hardness
 12.2 of 100 mg/L only. See part 7050.0222, subpart 2, for examples at other hardness values and
 12.3 equations to calculate lead standards for any hardness value not to exceed 400 mg/L.

12.4 (15) Manganese, total, $\mu\text{g}/\text{L}$

12.5	--	--	--	50(S)	--	--	--	--
12.6	2A	2A	2A	1B	3A/3B	4A	4B	5

12.7 CS MS FAV DC 1C IR LS AN

12.9 (16) Mercury, total, in water, ng/L

12.10	6.9	2,400*	4,900*	2,000	--	--	--	--
-------	-----	--------	--------	-------	----	----	----	----

12.11 (17) Mercury, total in edible fish tissue, mg/kg or parts per million

12.12	0.2	--	--	--	--	--	--	--
-------	-----	----	----	----	----	----	----	----

12.13 (18) Nickel, total, $\mu\text{g}/\text{L}$

12.14	158	1,418	2,836	--	--	--	--	--
-------	-----	-------	-------	----	----	----	----	----

12.15 Class 2A nickel standards are hardness dependent. Nickel values shown are for a total
 12.16 hardness of 100 mg/L only. See part 7050.0222, subpart 2, for examples at other hardness
 12.17 values and equations to calculate nickel standards for any hardness value not to exceed 400
 12.18 mg/L.

12.19 (19) Selenium, total, $\mu\text{g}/\text{L}$

12.20	5.0	20	40	50	--	--	--	--
-------	-----	----	----	----	----	----	----	----

12.21 (20) Silver, total, $\mu\text{g}/\text{L}$

12.22	0.12	2.0	4.1	100(S)	--	--	--	--
-------	------	-----	-----	--------	----	----	----	----

12.23 Class 2A silver MS and FAV are hardness dependent. Silver values shown are for a total
 12.24 hardness of 100 mg/L only. See part 7050.0222, subpart 2, for examples at other hardness
 12.25 values and equations to calculate silver standards for any hardness value not to exceed 400
 12.26 mg/L.

	2A CS	2A MS	2A FAV	1B DC	3A/3B IC	4A IR	4B LS	5 AN
--	------------------	------------------	-------------------	------------------	---------------------	------------------	------------------	-----------------

13.4 (21) Thallium, total, µg/L

13.5	0.28	64	128	2	--	--	--	--
------	------	----	-----	---	----	----	----	----

13.6 (22) Zinc, total, µg/L

13.7	106	117	234	5,000	--	--	--	--
13.8				(S)				

13.9 Class 2A zinc standards are hardness dependent. Zinc values shown are for a total hardness of 100 mg/L only. See part 7050.0222, subpart 2, for examples at other hardness values and equations to calculate zinc standards for any hardness value not to exceed 400 mg/L.

C. ORGANIC POLLUTANTS OR CHARACTERISTICS

	2A CS	2A MS	2A FAV	1B DC	3A/3B IC	4A IR	4B LS	5 AN
--	------------------	------------------	-------------------	------------------	---------------------	------------------	------------------	-----------------

13.16 (1) Acenaphthene, µg/L

13.17	20	56	112	--	--	--	--	--
-------	----	----	-----	----	----	----	----	----

13.18 (2) Acetochlor, µg/L

13.19	3.6	86	173	--	--	--	--	--
-------	-----	----	-----	----	----	----	----	----

13.20 (3) Acrylonitrile (c), µg/L

13.21	0.38	1,140*	2,281*	--	--	--	--	--
-------	------	--------	--------	----	----	----	----	----

13.22 (4) Alachlor (c), µg/L

13.23	3.8	800*	1,600*	2	--	--	--	--
-------	-----	------	--------	---	----	----	----	----

13.24 (5) Aldicarb, µg/L

10/28/20

REVISOR

CKM/JK

RD4335

14.1	--	--	--	3	--	--	--	--	--
14.2	2A CS	2A MS	2A FAV	1B DC	3A/3B IC	4A IR	4B LS	5 AN	
14.3									
<hr/>									
14.4									
14.5	(6) Aldicarb sulfone, µg/L								
14.6	--	--	--	2	--	--	--	--	--
14.7	(7) Aldicarb sulfoxide, µg/L								
14.8	--	--	--	4	--	--	--	--	--
14.9	(8) Anthracene, µg/L								
14.10	0.035	0.32	0.63	--	--	--	--	--	--
14.11	(9) Atrazine (c), µg/L								
14.12	3.4	323	645	3	--	--	--	--	--
14.13	(10) Benzene (c), µg/L								
14.14	5.1	4,487*	8,974*	5	--	--	--	--	--
14.15	2A CS	2A MS	2A FAV	1B DC	3A/3B IC	4A IR	4B LS	5 AN	
14.16									
<hr/>									
14.17									
14.18	(11) Benzo(a)pyrene, µg/L								
14.19	--	--	--	0.2	--	--	--	--	--
14.20	(12) Bromoform, µg/L								
14.21	33	2,900	5,800	See sub-	--	--	--	--	--
14.22				item (73)					
14.23	(13) Carbofuran, µg/L								

10/28/20

REVISOR

CKM/JK

RD4335

15.1	--	--	--	40	--	--	--	--
15.2	(14) Carbon tetrachloride (c), µg/L							
15.3	1.9	1,750*	3,500*	5	--	--	--	--
15.4	(15) Chlordane (c), ng/L							
15.5	0.073	1,200*	2,400*	2,000	--	--	--	--
15.6	2A	2A	2A	1B	3A/3B	4A	4B	5
15.7	CS	MS	FAV	DC	I_C	IR	LS	AN
15.8	<hr/>							
15.9	(16) Chlorobenzene, µg/L (Monochlorobenzene)							
15.10	20	423	846	100	--	--	--	--
15.11	(17) Chloroform (c), µg/L							
15.12	53	1,392	2,784	See sub-	--	--	--	--
15.13				item (73)				
15.14	(18) Chloryrifos, µg/L							
15.15	0.041	0.083	0.17	--	--	--	--	--
15.16	(19) Dalapon, µg/L							
15.17	--	--	--	200	--	--	--	--
15.18	(20) DDT (c), ng/L							
15.19	0.11	550*	1,100*	--	--	--	--	--
15.20	2A	2A	2A	1B	3A/3B	4A	4B	5
15.21	CS	MS	FAV	DC	I_C	IR	LS	AN
15.22	<hr/>							
15.23	(21) 1,2-Dibromo-3-chloropropane (c), µg/L							

10/28/20

REVISOR

CKM/JK

RD4335

16.1	--	--	--	--	0.2	--	--	--	--
16.2 (22) Dichlorobenzene (ortho), µg/L									
16.3	--	--	--	--	600	--	--	--	--
16.4 (23) 1,4-Dichlorobenzene (para) (c), µg/L									
16.5	--	--	--	--	75	--	--	--	--
16.6	(24) 1,2-Dichloroethane (c), µg/L								
16.7	3.5	45,050*	90,100*	5	--	--	--	--	--
16.8	(25) 1,1-Dichloroethylene, µg/L								
16.9	--	--	--	--	7	--	--	--	--
16.10	2A	2A	2A	1B	3A/3B	4A	4B	5	
16.11	CS	MS	FAV	DC	IC	IR	LS	AN	
16.12	<hr/>								
16.13	(26) 1,2-Dichloroethylene (cis), µg/L								
16.14	--	--	--	--	70	--	--	--	--
16.15	(27) 1,2-Dichloroethylene (trans), µg/L								
16.16	--	--	--	--	100	--	--	--	--
16.17	(28) 2,4-Dichlorophenoxyacetic acid (2,4-D), µg/L								
16.18	--	--	--	--	70	--	--	--	--
16.19	(29) 1,2-Dichloropropane (c), µg/L								
16.20	--	--	--	--	5	--	--	--	--
16.21	(30) Dieldrin (c), ng/L								
16.22	0.0065	1,300*	2,500*	--	--	--	--	--	--

17.1	2A	2A	2A	1B	3A/3B	4A	4B	5
17.2	CS	MS	FAV	DC	I€	IR	LS	AN

17.3

17.4 (31) Di-2-ethylhexyl adipate, µg/L

17.5 -- -- -- 400 -- -- -- -- --

17.6 (32) Di-2-ethylhexyl phthalate (c), µg/L

17.7 1.9 --* --* 6 -- -- -- -- --

17.8 (33) Di-n-Octyl phthalate, µg/L

17.9 30 825 1,650 -- -- -- -- -- --

17.10 (34) Dinoseb, µg/L

17.11 -- -- -- 7 -- -- -- -- --

17.12 (35) Diquat, µg/L

17.13 -- -- -- 20 -- -- -- -- --

17.14	2A	2A	2A	1B	3A/3B	4A	4B	5
17.15	CS	MS	FAV	DC	I€	IR	LS	AN

17.16

17.17 (36) Endosulfan, µg/L

17.18 0.0076 0.084 0.17 -- -- -- -- -- --

17.19 (37) Endothall, µg/L

17.20 -- -- -- 100 -- -- -- -- --

17.21 (38) Endrin, µg/L

17.22 0.0039 0.090 0.18 2 -- -- -- -- --

17.23 (39) Ethylbenzene (c), µg/L

10/28/20 REVISOR CKM/JK RD4335

18.1 68 1,859 3,717 700 -- -- -- -- --

18.2 (40) Ethylene dibromide, µg/L

18.3 -- -- -- 0.05 -- -- -- -- --

18.4 **2A**
18.5 **CS** **2A**
MS **2A**
FAV **1B**
DC **3A/3B**
IC **4A**
IR **4B**
LS **5**
AN

18.7 (41) Fluoranthene, µg/L

18.8 1.9 3.5 6.9 -- -- -- -- --

18.9 (42) Glyphosate, µg/L

18.10 -- -- -- 700 -- -- -- -- --

18.11 (43) Haloacetic acids (c), µg/L (Bromoacetic acid, Dibromoacetic acid, Dichloroacetic acid,
18.12 Monochloroacetic acid, and Trichloroacetic acid)

18.13 -- -- -- 60 -- -- -- -- --

18.14 (44) Heptachlor (c), ng/L

18.15 0.10 260* 520* 400 -- -- -- -- --

18.16 (45) Heptachlor epoxide (c), ng/L

18.17 0.12 270* 530* 200 -- -- -- -- --

18.18 **2A**
18.19 **CS** **2A**
MS **2A**
FAV **1B**
DC **3A/3B**
IC **4A**
IR **4B**
LS **5**
AN

18.21 (46) Hexachlorobenzene (c), ng/L

18.22 0.061 --* --* 1,000 -- -- -- --

18.23 (47) Hexachlorocyclopentadiene, µg/L

19.1	--	--	--	50	--	--	--	--	--
19.2 (48) Lindane (c), µg/L (Hexachlorocyclohexane, gamma-)									
19.3	0.0087	1.0*	2.0*	0.2	--	--	--	--	--
19.4 (49) Methoxychlor, µg/L									
19.5	--	--	--	40	--	--	--	--	--
19.6 (50) Methylene chloride (c), µg/L (Dichloromethane)									
19.7	45	13,875*	27,749*	5	--	--	--	--	--
19.8	2A	2A	2A	1B	3A/3B	4A	4B	5	
19.9	CS	MS	FAV	DC	IC	IR	LS	AN	
19.10	<hr/>								
19.11	(51) Metolachlor								
19.12	23	271	543	--	--	--	--	--	--
19.13	(52) Naphthalene, µg/L								
19.14	65	409	818	--	--	--	--	--	--
19.15	(53) Oxamyl, µg/L (Vydate)								
19.16	--	--	--	200	--	--	--	--	--
19.17	(54) Parathion, µg/L								
19.18	0.013	0.07	0.13	--	--	--	--	--	--
19.19	(55) Pentachlorophenol, µg/L								
19.20	0.93	15	30	1	--	--	--	--	--
19.21	Class 2A MS and FAV are pH dependent. Pentachlorophenol values shown are for a pH of 7.5 only. See part 7050.0222, subpart 2, for examples at other pH values and equations to calculate pentachlorophenol standards for any pH value.								
19.22									
19.23									

20.1	2A	2A	2A	1B	3A/3B	4A	4B	5
20.2	CS	MS	FAV	DC	IE	IR	LS	AN

20.4 (56) Phenanthrene, µg/L

20.5	3.6	32	64	--	--	--	--	--
------	-----	----	----	----	----	----	----	----

20.6 (57) Phenol, µg/L

20.7	123	2,214	4,428	--	--	--	--	--
------	-----	-------	-------	----	----	----	----	----

20.8 (58) Picloram, µg/L

20.9	--	--	--	500	--	--	--	--
------	----	----	----	-----	----	----	----	----

20.10 (59) Polychlorinated biphenyls (c), ng/L (PCBs, total)

20.11	0.014	1,000*	2,000*	500	--	--	--	--
-------	-------	--------	--------	-----	----	----	----	----

20.12 (60) Simazine, µg/L

20.13	--	--	--	4	--	--	--	--
-------	----	----	----	---	----	----	----	----

20.14	2A	2A	2A	1B	3A/3B	4A	4B	5
20.15	CS	MS	FAV	DC	IE	IR	LS	AN

20.17 (61) Styrene (c), µg/L

20.18	--	--	--	100	--	--	--	--
-------	----	----	----	-----	----	----	----	----

20.19 (62) 2,3,7,8-Tetrachlorodibenzo-p-dioxin, ng/L (TCDD-dioxin)

20.20	--	--	--	0.03	--	--	--	--
-------	----	----	----	------	----	----	----	----

20.21 (63) 1,1,2,2-Tetrachloroethane (c), µg/L

20.22	1.1	1,127*	2,253*	--	--	--	--	--
-------	-----	--------	--------	----	----	----	----	----

20.23 (64) Tetrachloroethylene (c), µg/L

10/28/20 REVISOR CKM/JK RD4335

21.1	3.8	428*	857*	5	--	--	--	--
21.2 (65) Toluene, µg/L								
21.3	253	1,352	2,703	1,000	--	--	--	--
21.4	2A	2A	2A	1B	3A/3B	4A	4B	5
21.5	CS	MS	FAV	DC	I C	IR	LS	AN
21.6	<hr/>							
21.7	(66) Toxaphene (c), ng/L							
21.8	0.31	730*	1,500*	3,000	--	--	--	--
21.9	(67) 2,4,5-TP, µg/L (Silvex)							
21.10	--	--	--	50	--	--	--	--
21.11	(68) 1,2,4-Trichlorobenzene, µg/L							
21.12	--	--	--	70	--	--	--	--
21.13	(69) 1,1,1-Trichloroethane, µg/L							
21.14	329	2,957	5,913	200	--	--	--	--
21.15	(70) 1,1,2-Trichloroethane, µg/L							
21.16	--	--	--	5	--	--	--	--
21.17	2A	2A	2A	1B	3A/3B	4A	4B	5
21.18	CS	MS	FAV	DC	I C	IR	LS	AN
21.19	<hr/>							
21.20	(71) 1,1,2-Trichloroethylene (c), µg/L							
21.21	25	6,988	13,976*	5	--	--	--	--
21.22	(72) 2,4,6-Trichlorophenol, µg/L							
21.23	2.0	102	203	--	--	--	--	--

22.1 (73) Trihalomethanes, total (c), µg/L (Bromodichloromethane, Bromoform,
 22.2 Chlorodibromomethane, and Chloroform)

22.3 -- -- -- 80 -- -- -- --

22.4 (74) Vinyl chloride (c), µg/L

22.5 0.17 --* --* 2 -- -- -- --

22.6 (75) Xylenes, total, µg/L

22.7 166 1,407 2,814 10,000 -- -- -- --

[For text of items D and E, see Minnesota Rules]

22.8 *[For text of subpart 4, see Minnesota Rules]*

22.10 Subp. 4a. **Cool and warm water aquatic life and habitat, drinking water, and associated use classes.** Water quality standards applicable to use classes 1B or 1C; 2Bd, 2Bde, 2Bdg, or 2Bdm; ~~3A or 3B~~ 3; 4A and 4B; and 5 surface waters. The water quality standards in part 7050.0222, subpart 3, that apply to class 2Bd also apply to classes 2Bde, 2Bdg, and 2Bdm. In addition to the water quality standards in part 7050.0222, subpart 3, the biological criteria defined in part 7050.0222, subpart 3d, apply to classes 2Bde, 2Bdg, and 2Bdm.

22.17 A. MISCELLANEOUS SUBSTANCE, CHARACTERISTIC, OR POLLUTANT

22.18	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
22.19	CS	MS	FAV	DC	IC	IR	LS	AN

22.21 (1) Ammonia, un-ionized as N, µg/L

22.22 40 -- -- -- -- -- -- --

22.23 (2) Asbestos, >10 µm (c), fibers/L

10/28/20

REVISOR

CKM/JK

RD4335

23.1	--	--	--	7.0e+06	--	--	--	--	--
23.2	(3) Bicarbonates (HCO_3), meq/L								
23.3	--	--	--	--	--	5	--	--	--
23.4	(4)(3) Bromate, $\mu\text{g}/\text{L}$								
23.5	--	--	--	10	--	--	--	--	--
23.6	(5)(4) Chloride, mg/L								
23.7	230	860	1,720	250(S)	50/100	--	--	--	--
23.8	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5	
23.9	CS	MS	FAV	DC	IC	IR	LS	AN	
23.10	<hr/>								
23.11	(6)(5) Chlorine, total residual, $\mu\text{g}/\text{L}$								
23.12	11	19	38	--	--	--	--	--	--
23.13	(7)(6) Chlorite, $\mu\text{g}/\text{L}$								
23.14	--	--	--	1,000	--	--	--	--	--
23.15	(8)(7) Color, Pt-Co								
23.16	--	--	--	15(S)	--	--	--	--	--
23.17	(9)(8) Cyanide, free, $\mu\text{g}/\text{L}$								
23.18	5.2	22	45	200	--	--	--	--	--
23.19	(10)(9) <i>Escherichia (E.) coli</i> bacteria, organisms/100 mL								
23.20	See item D	--	--	--	--	--	--	--	--
23.21									

24.1	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
24.2	CS	MS	FAV	DC	IC	IR	LS	AN

24.3

24.4 ~~(11)~~ (10) Eutrophication standards for lakes, shallow lakes, and reservoirs (phosphorus, total, µg/L; chlorophyll-a, µg/L; Secchi disk transparency, meters)

24.6 See part -- -- -- -- -- -- -- --
 24.7 7050.0222,
 24.8 subparts
 24.9 3 and 3a

24.10 ~~(12)~~ (11) Eutrophication standards for rivers, streams, and navigational pools (phosphorus, total µg/L; chlorophyll-a (seston), µg/L; five-day biochemical oxygen demand (BOD₅), mg/L; diel dissolved oxygen flux, mg/L; chlorophyll-a (periphyton), mg/m²)

24.13 See part -- -- -- -- -- -- -- --
 24.14 7050.0222,
 24.15 subparts 3
 24.16 and 3b

24.17 ~~(13)~~ (12) Fluoride, mg/L

24.18 -- -- -- -- 4 -- -- -- --

24.19 ~~(14)~~ (13) Fluoride, mg/L

24.20 -- -- -- 2(S) -- -- -- --

24.21 ~~(15)~~ (14) Foaming agents, µg/L

24.22 -- -- -- 500(S) -- -- -- --

24.23 ~~(16)~~ Hardness, Ca+Mg as CaCO₃, mg/L

24.24 -- -- -- -- 50/250 -- -- --

24.25	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
24.26	CS	MS	FAV	DC	IC	IR	LS	AN

24.27

25.1 ~~(17)~~(15) Hydrogen sulfide, mg/L

25.2 -- -- -- -- -- -- -- -- 0.02

25.3 ~~(18)~~(16) Nitrate as N, mg/L

25.4 -- -- -- -- 10 -- -- -- --

25.5 ~~(19)~~(17) Nitrite as N, mg/L

25.6 -- -- -- -- 1 -- -- -- --

25.7 ~~(20)~~(18) Nitrate + Nitrite as N, mg/L25.8
25.9 -- -- -- -- 10 -- -- 100 --25.10 ~~(21)~~(19) Odor, TON

25.11 -- -- -- 3(S) -- -- -- --

25.12 **2Bd**
25.13 **CS** **2Bd**
 MS **2Bd**
 FAV **1B/1C**
 DC **3A/3B**
 I~~E~~ **4A**
 IR **4B**
 LS **5**
 AN

25.14 _____

25.15 ~~(22)~~(20) Oil, µg/L

25.16 500 5,000 10,000 -- -- -- --

25.17 ~~(23)~~(21) Oxygen, dissolved, mg/L25.18 See part -- -- -- -- -- -- --
25.19 7050.0222,
25.20 subpart 325.21 ~~(24)~~(22) pH minimum, su25.22 6.5 -- -- 6.5(S) 6.5/6.0 6.0-- 6.0 6.025.23 ~~(25)~~(23) pH maximum, su

10/28/20

REVISOR

CKM/JK

RD4335

26.1	9.0	--	--	8.5(S)	8.5/9.0	<u>8.5</u> --	9.0	9.0
------	-----	----	----	--------	---------	---------------	-----	-----

26.2 (26) (24) Radioactive materials

26.3	See item E	--	--	See item E	--	See item E	See item E	--
------	------------	----	----	------------	----	------------	------------	----

26.5	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
------	------------	------------	------------	--------------	--------------	-----------	-----------	----------

26.6	CS	MS	FAV	DC	IE	IR	LS	AN
------	-----------	-----------	------------	-----------	-----------	-----------	-----------	-----------

26.7 _____

26.8 (27) Salinity, total, mg/L

26.9	--	--	--	--	--	--	1,000	--
------	----	----	----	----	----	----	-------	----

26.10 (28) Sodium, meq/L

26.11	--	--	--	--	--	60% of total cations	--	--
-------	----	----	----	----	----	----------------------	----	----

26.14 (29) Specific conductance at 25°C, µmhos/cm

26.15	--	--	--	--	--	1,000	--	--
-------	----	----	----	----	----	-------	----	----

26.16 (30) (25) Sulfate, mg/L

26.17	--	--	--	250(S)	--	--	600	--
-------	----	----	----	--------	----	----	-----	----

26.19 (31) (26) Sulfates, wild rice present, mg/L

26.20	--	--	--	--	--	10	--	--
-------	----	----	----	----	----	----	----	----

26.21	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
-------	------------	------------	------------	--------------	--------------	-----------	-----------	----------

26.22	CS	MS	FAV	DC	IE	IR	LS	AN
-------	-----------	-----------	------------	-----------	-----------	-----------	-----------	-----------

26.23 _____

26.24 (32) (27) Temperature, °F

10/28/20

REVISOR

CKM/JK

RD4335

27.1 See -- -- -- -- -- --
 27.2 item F -- -- -- -- -- --

27.3 ~~(33) Total dissolved salts, mg/L~~

27.4 -- -- -- -- -- -- 700 -- --

27.5 ~~(34) (28) Total dissolved solids, mg/L~~

27.6
 27.7 -- -- -- -- 500(S) -- -- -- 3,000 --

27.8 ~~(35) (29) Total suspended solids (TSS), mg/L~~

27.9 See part
 27.10 7050.0222,
 27.11 subpart 3 -- -- -- -- -- -- --

27.12 B. METALS AND ELEMENTS

	2Bd CS	2Bd MS	2Bd FAV	1B/1C DC	3A/3B IC	4A IR	4B LS	5 AN
--	------------------	------------------	-------------------	--------------------	--------------------	-----------------	-----------------	----------------

27.16 (1) Aluminum, total, µg/L

27.17	125	1,072	2,145	50-	--	--	--	--
27.18				200(S)				

27.19 (2) Antimony, total, µg/L

27.20	5.5	90	180	6	--	--	--	--
-------	-----	----	-----	---	----	----	----	----

27.21 (3) Arsenic, total, µg/L

27.22	2.0	360	720	10	--	--	--	--
-------	-----	-----	-----	----	----	----	----	----

27.23 (4) Barium, total, µg/L

27.24	--	--	--	2,000	--	--	--	--
-------	----	----	----	-------	----	----	----	----

28.1 (5) Beryllium, total, µg/L

28.2	--	--	--	4.0	--	--	--	--	--
28.3	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5	
28.4	CS	MS	FAV	DC	IC	IR	LS	AN	

28.6 (6) Boron, total, µg/L

28.7	--	--	--	--	--	500	--	--	--
------	----	----	----	----	----	-----	----	----	----

28.8 (7) Cadmium, total, µg/L

28.9	1.1	33	67	5	--	--	--	--	--
------	-----	----	----	---	----	----	----	----	----

28.10 Class 2Bd cadmium standards are hardness dependent. Cadmium values shown are for a
 28.11 total hardness of 100 mg/L only. See part 7050.0222, subpart 3, for examples at other
 28.12 hardness values and equations to calculate cadmium standards for any hardness value not
 28.13 to exceed 400 mg/L.

28.14 (8) Chromium +3, total, µg/L

28.15	207	1,737	3,469	--	--	--	--	--	--
-------	-----	-------	-------	----	----	----	----	----	----

28.16 Class 2Bd trivalent chromium standards are hardness dependent. Chromium +3 values
 28.17 shown are for a total hardness of 100 mg/L only. See part 7050.0222, subpart 3, for examples
 28.18 at other hardness values and equations to calculate trivalent chromium standards for any
 28.19 hardness value not to exceed 400 mg/L.

28.20 (9) Chromium +6, total, µg/L

28.21	11	16	32	--	--	--	--	--	--
-------	----	----	----	----	----	----	----	----	----

28.22 (10) Chromium, total, µg/L

28.23	--	--	--	100	--	--	--	--	--
-------	----	----	----	-----	----	----	----	----	----

28.24	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5	
28.25	CS	MS	FAV	DC	IC	IR	LS	AN	

29.1 (11) Cobalt, total, µg/L

29.2	2.8	436	872	--	--	--	--	--
------	-----	-----	-----	----	----	----	----	----

29.3 (12) Copper, total, µg/L

29.4	9.8	18	35	1,000	--	--	--	--
29.5				(S)				

29.6 Class 2Bd copper standards are hardness dependent. Copper values shown are for a total
 29.7 hardness of 100 mg/L only. See part 7050.0222, subpart 3, for examples at other hardness
 29.8 values and equations to calculate copper standards for any hardness value not to exceed 400
 29.9 mg/L.

29.10 (13) Iron, total, µg/L

29.11	--	--	--	300(S)	--	--	--	--
-------	----	----	----	--------	----	----	----	----

29.12 (14) Lead, total, µg/L

29.13	3.2	82	164	NA	--	--	--	--
-------	-----	----	-----	----	----	----	----	----

29.14 Class 2Bd lead standards are hardness dependent. Lead values shown are for a total hardness
 29.15 of 100 mg/L only. See part 7050.0222, subpart 3, for examples at other hardness values and
 29.16 equations to calculate lead standards for any hardness value not to exceed 400 mg/L.

29.17 (15) Manganese, total, µg/L

29.18	--	--	--	50(S)	--	--	--	--
-------	----	----	----	-------	----	----	----	----

29.19	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
29.20	CS	MS	FAV	DC	IC	IR	LS	AN

29.21

29.22 (16) Mercury, total in water, ng/L

29.23	6.9	2,400*	4,900*	2,000	--	--	--	--
-------	-----	--------	--------	-------	----	----	----	----

29.24 (17) Mercury, total in edible fish tissue, mg/kg or parts per million

29.25	0.2	--	--	--	--	--	--	--
-------	-----	----	----	----	----	----	----	----

30.1 (18) Nickel, total, µg/L

30.2	158	1,418	2,836	--	--	--	--	--
------	-----	-------	-------	----	----	----	----	----

30.3 Class 2Bd nickel standards are hardness dependent. Nickel values shown are for a total
 30.4 hardness of 100 mg/L only. See part 7050.0222, subpart 3, for examples at other hardness
 30.5 values and equations to calculate nickel standards for any hardness value not to exceed 400
 30.6 mg/L.

30.7 (19) Selenium, total, µg/L

30.8	5.0	20	40	50	--	--	--	--
------	-----	----	----	----	----	----	----	----

30.9 (20) Silver, total, µg/L

30.10	1.0	2.0	4.1	100(S)	--	--	--	--
-------	-----	-----	-----	--------	----	----	----	----

30.11 Class 2Bd silver MS and FAV are hardness dependent. Silver values shown are for a total
 30.12 hardness of 100 mg/L only. See part 7050.0222, subpart 3, for examples at other hardness
 30.13 values and equations to calculate silver standards for any hardness value not to exceed 400
 30.14 mg/L.

30.15	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
30.16	CS	MS	FAV	DC	IC	IR	LS	AN

30.17

30.18 (21) Thallium, total, µg/L

30.19	0.28	64	128	2	--	--	--	--
-------	------	----	-----	---	----	----	----	----

30.20 (22) Zinc, total, µg/L

30.21	106	117	234	5,000	--	--	--	--
30.22				(S)				

30.23 Class 2Bd zinc standards are hardness dependent. Zinc values shown are for a total hardness
 30.24 of 100 mg/L only. See part 7050.0222, subpart 3, for examples at other hardness values and
 30.25 equations to calculate zinc standards for any hardness value not to exceed 400 mg/L.

30.26 C. ORGANIC POLLUTANTS OR CHARACTERISTICS

31.1	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
31.2	CS	MS	FAV	DC	ICIE	IR	LS	AN

31.3

31.4 (1) Acenaphthene, µg/L

31.5 20 56 112 -- -- -- -- --

31.6 (2) Acetochlor, µg/L

31.7 3.6 86 173 -- -- -- -- --

31.8 (3) Acrylonitrile (c), µg/L

31.9 0.38 1,140* 2,281* -- -- -- -- --

31.10 (4) Alachlor (c), µg/L

31.11 4.2 800* 1,600* 2 -- -- -- -- --

31.12 (5) Aldicarb, µg/L

31.13 -- -- -- 3 -- -- -- -- --

31.14	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
31.15	CS	MS	FAV	DC	ICIE	IR	LS	AN

31.16

31.17 (6) Aldicarb sulfone, µg/L

31.18 -- -- -- 2 -- -- -- -- --

31.19 (7) Aldicarb sulfoxide, µg/L

31.20 -- -- -- 4 -- -- -- -- --

31.21 (8) Anthracene, µg/L

31.22 0.035 0.32 0.63 -- -- -- -- --

31.23 (9) Atrazine (c), µg/L

10/28/20

REVISOR

CKM/JK

RD4335

32.1	3.4	323	645	3	--	--	--	--
32.2 (10) Benzene (c), µg/L								
32.3	6.0	4,487*	8,974*	5	--	--	--	--
32.4	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
32.5	CS	MS	FAV	DC	ICIC	IR	LS	AN
32.6	<hr/>							
32.7	(11) Benzo(a)pyrene, µg/L							
32.8	--	--	--	0.2	--	--	--	--
32.9	(12) Bromoform, µg/L							
32.10	41	2,900	5,800	See subitem (73)	--	--	--	--
32.11								
32.12								
32.13	(13) Carbofuran, µg/L							
32.14	--	--	--	40	--	--	--	--
32.15	(14) Carbon tetrachloride (c), µg/L							
32.16	1.9	1,750*	3,500*	5	--	--	--	--
32.17	(15) Chlordane (c), ng/L							
32.18	0.29	1,200*	2,400*	2,000	--	--	--	--
32.19	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
32.20	CS	MS	FAV	DC	ICIC	IR	LS	AN
32.21	<hr/>							
32.22	(16) Chlorobenzene, µg/L (Monochlorobenzene)							
32.23	20	423	846	100	--	--	--	--
32.24	(17) Chloroform (c), µg/L							

10/28/20

REVISOR

CKM/JK

RD4335

33.1	53	1,392	2,784	See subitem (73)	--	--	--	--	--
33.4	(18) Chlorpyrifos, µg/L								
33.5	0.041	0.083	0.17	--	--	--	--	--	--
33.6	(19) Dalapon, µg/L								
33.7	--	--	--	200	--	--	--	--	--
33.8	(20) DDT (c), ng/L								
33.9	1.7	550*	1,100*	--	--	--	--	--	--
33.10	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5	
33.11	CS	MS	FAV	DC	ICIC	IR	LS	AN	
33.12	_____								
33.13	(21) 1,2-Dibromo-3-chloropropane (c), µg/L								
33.14	--	--	--	0.2	--	--	--	--	--
33.15	(22) Dichlorobenzene (ortho), µg/L								
33.16	--	--	--	600	--	--	--	--	--
33.17	(23) 1,4-Dichlorobenzene (para) (c), µg/L								
33.18	--	--	--	75	--	--	--	--	--
33.19	(24) 1,2-Dichloroethane (c), µg/L								
33.20	3.8	45,050*	90,100*	5	--	--	--	--	--
33.21	(25) 1,1-Dichloroethylene, µg/L								
33.22	--	--	--	7	--	--	--	--	--

34.1	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
34.2	CS	MS	FAV	DC	ICIE	IR	LS	AN

34.3

34.4 (26) 1,2-Dichloroethylene (cis), µg/L

34.5	--	--	--	70	--	--	--	--
------	----	----	----	----	----	----	----	----

34.6 (27) 1,2-Dichloroethylene (trans), µg/L

34.7	--	--	--	100	--	--	--	--
------	----	----	----	-----	----	----	----	----

34.8 (28) 2,4-Dichlorophenoxyacetic acid (2,4-D), µg/L

34.9	--	--	--	70	--	--	--	--
------	----	----	----	----	----	----	----	----

34.10 (29) 1,2-Dichloropropane (c), µg/L

34.11	--	--	--	5	--	--	--	--
-------	----	----	----	---	----	----	----	----

34.12 (30) Dieldrin (c), ng/L

34.13	0.026	1,300*	2,500*	--	--	--	--	--
-------	-------	--------	--------	----	----	----	----	----

34.14	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
34.15	CS	MS	FAV	DC	ICIE	IR	LS	AN

34.16

34.17 (31) Di-2-ethylhexyl adipate, µg/L

34.18	--	--	--	400	--	--	--	--
-------	----	----	----	-----	----	----	----	----

34.19 (32) Di-2-ethylhexyl phthalate (c), µg/L

34.20	1.9	--*	--*	6	--	--	--	--
-------	-----	-----	-----	---	----	----	----	----

34.21 (33) Di-n-Octyl phthalate, µg/L

34.22	30	825	1,650	--	--	--	--	--
-------	----	-----	-------	----	----	----	----	----

34.23 (34) Dinoseb, µg/L

10/28/20

REVISOR

CKM/JK

RD4335

35.1	--	--	--	7	--	--	--	--	--
35.2 (35) Diquat, µg/L									
35.3	--	--	--	20	--	--	--	--	--
35.4	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5	
35.5	CS	MS	FAV	DC	ICIC	IR	LS	AN	
35.6	<hr/>								
35.7	(36) Endosulfan, µg/L								
35.8	0.029	0.28	0.56	--	--	--	--	--	--
35.9	(37) Endothall, µg/L								
35.10	--	--	--	100	--	--	--	--	--
35.11	(38) Endrin, µg/L								
35.12	0.016	0.090	0.18	2	--	--	--	--	--
35.13	(39) Ethylbenzene (c), µg/L								
35.14	68	1,859	3,717	700	--	--	--	--	--
35.15	(40) Ethylene dibromide, µg/L								
35.16	--	--	--	0.05	--	--	--	--	--
35.17	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5	
35.18	CS	MS	FAV	DC	ICIC	IR	LS	AN	
35.19	<hr/>								
35.20	(41) Fluoranthene, µg/L								
35.21	1.9	3.5	6.9	--	--	--	--	--	--
35.22	(42) Glyphosate, µg/L								
35.23	--	--	--	700	--	--	--	--	--

36.1 (43) Haloacetic acids (c), µg/L (Bromoacetic acid, Dibromoacetic acid, Dichloroacetic acid,
 36.2 Monochloroacetic acid, and Trichloroacetic acid)

36.3 -- -- -- 60 -- -- -- -- --

36.4 (44) Heptachlor (c), ng/L

36.5 0.39 260* 520* 400 -- -- -- -- --

36.6 (45) Heptachlor epoxide (c), ng/L

36.7 0.48 270* 530* 200 -- -- -- -- --

36.8 2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
36.9 CS	MS	FAV	DC	ICIC	IR	LS	AN

36.11 (46) Hexachlorobenzene (c), ng/L

36.12 0.24 --* --* 1,000 -- -- -- -- --

36.13 (47) Hexachlorocyclopentadiene, µg/L

36.14 -- -- -- 50 -- -- -- -- --

36.15 (48) Lindane (c), µg/L (Hexachlorocyclohexane, gamma-)

36.16 0.032 4.4* 8.8* 0.2 -- -- -- -- --

36.17 (49) Methoxychlor, µg/L

36.18 -- -- -- 40 -- -- -- -- --

36.19 (50) Methylene chloride (c), µg/L (Dichloromethane)

36.20 46 13,875* 27,749* 5 -- -- -- -- --

36.21 2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
36.22 CS	MS	FAV	DC	ICIC	IR	LS	AN

37.1 (51) Metolachlor

37.2	23	271	543	--	--	--	--	--
------	----	-----	-----	----	----	----	----	----

37.3 (52) Naphthalene, µg/L

37.4	81	409	818	--	--	--	--	--
------	----	-----	-----	----	----	----	----	----

37.5 (53) Oxamyl, µg/L (Vydate)

37.6	--	--	--	200	--	--	--	--
------	----	----	----	-----	----	----	----	----

37.7 (54) Parathion, µg/L

37.8	0.013	0.07	0.13	--	--	--	--	--
------	-------	------	------	----	----	----	----	----

37.9 (55) Pentachlorophenol, µg/L

37.10	1.9	15	30	1	--	--	--	--
-------	-----	----	----	---	----	----	----	----

37.11 Class 2Bd MS and FAV are pH dependent. Pentachlorophenol values shown are for a pH
 37.12 of 7.5 only. See part 7050.0222, subpart 3, for examples at other pH values and equations
 37.13 to calculate pentachlorophenol standards for any pH value.

37.14	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
37.15	CS	MS	FAV	DC	ICIC	IR	LS	AN

37.17 (56) Phenanthrene, µg/L

37.18	3.6	32	64	--	--	--	--	--
-------	-----	----	----	----	----	----	----	----

37.19 (57) Phenol, µg/L

37.20	123	2,214	4,428	--	--	--	--	--
-------	-----	-------	-------	----	----	----	----	----

37.21 (58) Picloram, µg/L

37.22	--	--	--	500	--	--	--	--
-------	----	----	----	-----	----	----	----	----

37.23 (59) Polychlorinated biphenyls (c), ng/L (PCBs, total)

10/28/20 REVISOR CKM/JK RD4335

38.1	0.029	1,000*	2,000*	500	--	--	--	--
38.2 (60) Simazine, µg/L								
38.3	--	--	--	4	--	--	--	--
38.4	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
38.5	CS	MS	FAV	DC	ICIC	IR	LS	AN
38.6	<hr/>							
38.7	(61) Styrene (c), µg/L							
38.8	--	--	--	100	--	--	--	--
38.9	(62) 2,3,7,8-Tetrachlorodibenzo-p-dioxin, ng/L (TCDD-dioxin)							
38.10	--	--	--	0.03	--	--	--	--
38.11	(63) 1,1,2,2-Tetrachloroethane (c), µg/L							
38.12	1.5	1,127*	2,253*	--	--	--	--	--
38.13	(64) Tetrachloroethylene (c), µg/L							
38.14	3.8	428*	857*	5	--	--	--	--
38.15	(65) Toluene, µg/L							
38.16	253	1,352	2,703	1,000	--	--	--	--
38.17	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
38.18	CS	MS	FAV	DC	ICIC	IR	LS	AN
38.19	<hr/>							
38.20	(66) Toxaphene (c), ng/L							
38.21	1.3	730*	1,500*	3,000	--	--	--	--
38.22	(67) 2,4,5-TP, µg/L (Silvex)							
38.23	--	--	--	50	--	--	--	--

39.1 (68) 1,2,4-Trichlorobenzene, µg/L

39.2 -- -- -- -- 70 -- -- -- --

39.3 (69) 1,1,1-Trichloroethane, µg/L

39.4 329 2,957 5,913 200 -- -- -- --

39.5 (70) 1,1,2-Trichloroethane, µg/L

39.6 -- -- -- -- 5 -- -- -- --

39.7	2Bd	2Bd	2Bd	1B/1C	3A/3B	4A	4B	5
39.8	CS	MS	FAV	DC	HCIE	IR	LS	AN

39.10 (71) 1,1,2-Trichloroethylene (c), µg/L

39.11 25 6,988* 13,976* 5 -- -- -- --

39.12 (72) 2,4,6-Trichlorophenol, µg/L

39.13 2.0 102 203 -- -- -- --

39.14 (73) Trihalomethanes, total (c), µg/L (Bromodichloromethane, Bromoform,
39.15 Chlorodibromomethane, and Chloroform)

39.16 -- -- -- -- 80 -- -- -- --

39.17 (74) Vinyl chloride (c), µg/L

39.18 0.18 --* --* 2 -- -- -- --

39.19 (75) Xylenes, total, µg/L

39.20 166 1,407 2,814 10,000 -- -- -- --

39.21 [For text of items D to F, see Minnesota Rules]

39.22 [For text of subpart 5, see Minnesota Rules]

40.1 **Subp. 5a. Cool and warm water aquatic life and habitat and associated use**
 40.2 **classes.** Water quality standards applicable to use classes 2B, 2Be, 2Bg, 2Bm, or 2D; ~~3A~~,
 40.3 ~~3B, or 3C~~; 4A and 4B; and 5 surface waters. See ~~parts 7050.0223, subpart 5; 7050.0224,~~
 40.4 ~~subpart 4; and part~~ 7050.0225, subpart 2, for class ~~3D, 4C, 3~~ and 5 standards applicable to
 40.5 wetlands, respectively. The water quality standards in part 7050.0222, subpart 4, that apply
 40.6 to class 2B also apply to classes 2Be, 2Bg, and 2Bm. In addition to the water quality standards
 40.7 in part 7050.0222, subpart 4, the biological criteria defined in part 7050.0222, subpart 4d,
 40.8 apply to classes 2Be, 2Bg, and 2Bm.

40.9 **A. MISCELLANEOUS SUBSTANCE, CHARACTERISTIC, OR POLLUTANT**

	2B&D CS	2B&D MS	2B&D FAV	3A/3B/3C I C	4A IR	4B LS	5 AN
--	-----------------------	-----------------------	------------------------	-----------------------------------	-----------------	-----------------	----------------

40.13 (1) Ammonia, un-ionized as N, µg/L

40.14	40	--	--	--	--	--	--
-------	----	----	----	----	----	----	----

40.15 (2) Bicarbonates (HCO_3), meq/L

40.16	--	--	--	--	5	--	--
-------	----	----	----	----	---	----	----

40.17 (3) Chloride, mg/L

40.18	230						
40.19	See						
40.20	<u>item F</u>	860	1,720	50/100/250	--	--	--

40.21 (4) Chlorine, total residual, µg/L

40.22	11	19	38	--	--	--	--
-------	----	----	----	----	----	----	----

40.23 (5) Cyanide, free, µg/L

40.24	5.2	22	45	--	--	--	--
-------	-----	----	----	----	----	----	----

41.1	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5
41.2	CS	MS	FAV	IC	IR	LS	AN

41.4 (6)(5) Escherichia (E.) coli bacteria, organisms/100 mL

41.5	See item D	--	--	--	--	--	--
------	------------	----	----	----	----	----	----

41.7 (7)(6) Eutrophication standards for lakes, shallow lakes, and reservoirs (phosphorus, total, µg/L; chlorophyll-a, µg/L; Secchi disk transparency, meters)

41.9	See part 7050.0222,	--	--	--	--	--	--
41.10	subparts						
41.11	4 and 4a						

41.13 (8)(7) Eutrophication standards for rivers, streams, and navigational pools (phosphorus, total µg/L; chlorophyll-a (seston), µg/L; five-day biochemical oxygen demand (BOD₅), mg/L; diel dissolved oxygen flux, mg/L; chlorophyll-a (periphyton), mg/m²)

41.16	See part 7050.0222,	--	--	--	--	--	--
41.17	subparts 4						
41.18	and 4b						

41.20 (9) Hardness, Ca+Mg as CaCO₃, mg/L

41.21	--	--	--	50/250/500	--	--	--
-------	----	----	----	------------	----	----	----

41.22 (10)(8) Hydrogen sulfide, mg/L

41.23	--	--	--	--	--	--	0.02
-------	----	----	----	----	----	----	------

41.24 (9) Nitrate + nitrite as N, mg/L

41.25	--	--	--	--	--	100	--
-------	----	----	----	----	----	-----	----

41.26 (11)(10) Oil, µg/L

41.27	500	5,000	10,000	--	--	--	--
-------	-----	-------	--------	----	----	----	----

42.1	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5
42.2	CS	MS	FAV	IC	IR	LS	AN

42.3 _____

42.4 **(12) (11)** Oxygen, dissolved, mg/L

42.5	See part	--	--	--	--	--	--
42.6	7050.0222,						
42.7	subparts						
42.8	4 and 6						

42.9 **(13) (12)** pH minimum, su

42.10	6.5	--	--	6.5/6.0/6.0	6.0 --	6.0	6.0
42.11	See						
42.12	item E						

42.13 **(14) (13)** pH maximum, su

42.14	9.0	--	--	8.5/9.0/9.0	8.5 --	9.0	9.0
42.15	See						
42.16	item E						

42.17 **(15) (14)** Radioactive materials

42.18	See	--	--	--	See	See	--
42.19	item F_G				item F_G	item F_G	

42.20 **(16)** Salinity, total, mg/L

42.21	--	--	--	--	--	1,000	--
-------	----	----	----	----	----	-------	----

42.22	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5
42.23	CS	MS	FAV	IC	IR	LS	AN

42.24 _____

42.25 **(15)** Settleable solids, mL/L

42.26	See part						
42.27	7050.0222,						
42.28	subpart 6	--	--	--	--	--	--

43.1 (17) Sodium, meq/L

43.2 -- -- -- -- -- 60% of -- --
 43.3
 43.4 total eations

43.5 (18) Specific conductance at 25°C, μ mhos/cm

43.6 -- -- -- -- -- 1,000 -- --

43.7 (19) (16) Sulfates, wild rice present, mg/L

43.8 -- -- -- -- -- 10 -- --

43.9 (17) Sulfate, mg/L

43.10 -- -- -- -- -- -- 600 --

43.11 (20) (18) Temperature, °F

43.12 See item G H -- -- -- -- -- -- --

43.14 (21) Total dissolved salts, mg/L

43.15 -- -- -- -- -- 700 -- --

43.16 (19) Total dissolved solids, mg/L

43.17 -- -- -- -- -- -- 3,000 --

43.18 (22) (20) Total suspended solids (TSS), mg/L

43.19 See part
 43.20 7050.0222,
 43.21 subpart 4 -- -- -- -- -- --

43.22 B. METALS AND ELEMENTS

	2B&D CS	2B&D MS	2B&D FAV	3A/3B/3C IC	4A IR	4B LS	5 AN
--	------------------------------	------------------------------	-------------------------------	---	------------------------	------------------------	-----------------------

44.4 (1) Aluminum, total, $\mu\text{g/L}$

44.5	125	1,072	2,145	--	--	--	--
------	-----	-------	-------	----	----	----	----

44.6 (2) Antimony, total, $\mu\text{g/L}$

44.7	31	90	180	--	--	--	--
------	----	----	-----	----	----	----	----

44.8 (3) Arsenic, total, $\mu\text{g/L}$

44.9	53	360	720	--	--	--	--
------	----	-----	-----	----	----	----	----

44.10 (4) Boron, total, $\mu\text{g/L}$

44.11	--	--	--	--	500	--	--
-------	----	----	----	----	-----	----	----

44.12 (5) Cadmium, total, $\mu\text{g/L}$

44.13	1.1	33	67	--	--	--	--
-------	-----	----	----	----	----	----	----

44.14 Class 2B and 2D cadmium standards are hardness dependent. Cadmium values shown are
44.15 for a total hardness of 100 mg/L only. See part 7050.0222, subpart 4, for examples at other
44.16 hardness values and equations to calculate cadmium standards for any hardness value not
44.17 to exceed 400 mg/L.

	2B&D CS	2B&D MS	2B&D FAV	3A/3B/3C IC	4A IR	4B LS	5 AN
--	------------------------------	------------------------------	-------------------------------	---	------------------------	------------------------	-----------------------

44.21 (6) Chromium +3, total, $\mu\text{g/L}$

44.22	207	1,737	3,469	--	--	--	--
-------	-----	-------	-------	----	----	----	----

44.23 Class 2B and 2D trivalent chromium standards are hardness dependent. Chromium +3 values
44.24 shown are for a total hardness of 100 mg/L only. See part 7050.0222, subpart 4, for examples
44.25 at other hardness values and equations to calculate trivalent chromium standards for any
44.26 hardness value not to exceed 400 mg/L.

45.1 (7) Chromium +6, total, µg/L

45.2	11	16	32	--	--	--	--
------	----	----	----	----	----	----	----

45.3 (8) Cobalt, total, µg/L

45.4	5.0	436	872	--	--	--	--
------	-----	-----	-----	----	----	----	----

45.5 (9) Copper, total, µg/L

45.6	9.8	18	35	--	--	--	--
------	-----	----	----	----	----	----	----

45.7 Class 2B and 2D copper standards are hardness dependent. Copper values shown are for a
 45.8 total hardness of 100 mg/L only. See part 7050.0222, subpart 4, for examples at other
 45.9 hardness values and equations to calculate copper standards for any hardness value not to
 45.10 exceed 400 mg/L.

45.11 (10) Lead, total, µg/L

45.12	3.2	82	164	--	--	--	--
-------	-----	----	-----	----	----	----	----

45.13 Class 2B and 2D lead standards are hardness dependent. Lead values shown are for a total
 45.14 hardness of 100 mg/L only. See part 7050.0222, subpart 4, for examples at other hardness
 45.15 values and equations to calculate lead standards for any hardness value not to exceed 400
 45.16 mg/L.

45.17	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5
45.18	CS	MS	FAV	IC	IR	LS	AN

45.19

45.20 (11) Mercury, total in water, ng/L

45.21	6.9	2,400*	4,900*	--	--	--	--
-------	-----	--------	--------	----	----	----	----

45.22 (12) Mercury, total in edible fish tissue, mg/kg or parts per million

45.23	0.2	--	--	--	--	--	--
-------	-----	----	----	----	----	----	----

45.24 (13) Nickel, total, µg/L

45.25	158	1,418	2,836	--	--	--	--
-------	-----	-------	-------	----	----	----	----

46.1 Class 2B and 2D nickel standards are hardness dependent. Nickel values shown are for a
 46.2 total hardness of 100 mg/L only. See part 7050.0222, subpart 4, for examples at other
 46.3 hardness values and equations to calculate nickel standards for any hardness value not to
 46.4 exceed 400 mg/L.

46.5 (14) Selenium, total, µg/L

46.6	5.0	20	40	—	--	--	--
------	-----	----	----	---	----	----	----

46.7 (15) Silver, total, µg/L

46.8	1.0	2.0	4.1	—	--	--	--
------	-----	-----	-----	---	----	----	----

46.9 Class 2B and 2D silver MS and FAV are hardness dependent. Silver values shown are for
 46.10 a total hardness of 100 mg/L only. See part 7050.0222, subpart 4, for examples at other
 46.11 hardness values and equations to calculate silver standards for any hardness value not to
 46.12 exceed 400 mg/L.

46.13	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5
46.14	CS	MS	FAV	IC	IR	LS	AN

46.15

46.16 (16) Thallium, total, µg/L

46.17	0.56	64	128	—	--	--	--
-------	------	----	-----	---	----	----	----

46.18 (17) Zinc, total, µg/L

46.19	106	117	234	—	--	--	--
-------	-----	-----	-----	---	----	----	----

46.20 Class 2B and 2D zinc standards are hardness dependent. Zinc values shown are for a total
 46.21 hardness of 100 mg/L only. See part 7050.0222, subpart 4, for examples at other hardness
 46.22 values and equations to calculate zinc standards for any hardness value not to exceed 400
 46.23 mg/L.

46.24 C. ORGANIC POLLUTANTS OR CHARACTERISTICS

46.25	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5
46.26	CS	MS	FAV	IC	IR	LS	AN

46.27

46.28 (1) Acenaphthene, µg/L

10/28/20

REVISOR

CKM/JK

RD4335

47.1	20	56	112	--	--	--	--
47.2	(2) Acetochlor, µg/L						
47.3	3.6	86	173	--	--	--	--
47.4	(3) Acrylonitrile (c), µg/L						
47.5	0.89	1,140*	2,281*	--	--	--	--
47.6	(4) Alachlor (c), µg/L						
47.7	59	800	1,600	--	--	--	--
47.8	(5) Anthracene, µg/L						
47.9	0.035	0.32	0.63	--	--	--	--
47.10	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5
47.11	CS	MS	FAV	I€	IR	LS	AN
47.12	<hr/>						
47.13	(6) Atrazine (c), µg/L						
47.14	10	323	645	--	--	--	--
47.15	(7) Benzene (c), µg/L						
47.16	98	4,487	8,974	--	--	--	--
47.17	(8) Bromoform, µg/L						
47.18	466	2,900	5,800	--	--	--	--
47.19	(9) Carbon tetrachloride (c), µg/L						
47.20	5.9	1,750*	3,500*	--	--	--	--
47.21	(10) Chlordane (c), ng/L						
47.22	0.29	1,200*	2,400*	--	--	--	--

48.1	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5
48.2	CS	MS	FAV	Iϵ	IR	LS	AN

48.4 (11) Chlorobenzene, $\mu\text{g/L}$ (Monochlorobenzene)

48.5	20	423	846	--	--	--	--
------	----	-----	-----	----	----	----	----

48.6 (12) Chloroform (c), $\mu\text{g/L}$

48.7	155	1,392	2,78	--	--	--	--
------	-----	-------	------	----	----	----	----

48.8 (13) Chlорpyrifos, $\mu\text{g/L}$

48.9	0.041	0.083	0.17	--	--	--	--
------	-------	-------	------	----	----	----	----

48.10 (14) DDT (c), ng/L

48.11	1.7	550*	1,100*	--	--	--	--
-------	-----	------	--------	----	----	----	----

48.12 (15) 1,2-Dichloroethane (c), $\mu\text{g/L}$

48.13	190	45,050*	90,100*	--	--	--	--
-------	-----	---------	---------	----	----	----	----

48.14	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5
48.15	CS	MS	FAV	Iϵ	IR	LS	AN

48.17 (16) Dieldrin (c), ng/L

48.18	0.026	1,300*	2,500*	--	--	--	--
-------	-------	--------	--------	----	----	----	----

48.19 (17) Di-2-ethylhexyl phthalate (c), $\mu\text{g/L}$

48.20	2.1	--*	--*	--	--	--	--
-------	-----	-----	-----	----	----	----	----

48.21 (18) Di-n-Octyl phthalate, $\mu\text{g/L}$

48.22	30	825	1,650	--	--	--	--
-------	----	-----	-------	----	----	----	----

48.23 (19) Endosulfan, $\mu\text{g/L}$

10/28/20 REVISOR CKM/JK RD4335

49.1	0.031	0.28	0.56	--	--	--	--	--
49.2	(20) Endrin, µg/L							
49.3	0.016	0.090	0.18	--	--	--	--	--
49.4	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5	
49.5	CS	MS	FAV	IC	IR	LS	AN	
49.6								
49.7	(21) Ethylbenzene (c), µg/L							
49.8	68	1,859	3,717	--	--	--	--	--
49.9	(22) Fluoranthene, µg/L							
49.10	1.9	3.5	6.9	--	--	--	--	--
49.11	(23) Heptachlor (c), ng/L							
49.12	0.39	260*	520*	--	--	--	--	--
49.13	(24) Heptachlor epoxide (c), ng/L							
49.14	0.48	270*	530*	--	--	--	--	--
49.15	(25) Hexachlorobenzene (c), ng/L							
49.16	0.24	--*	--*	--	--	--	--	--
49.17	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5	
49.18	CS	MS	FAV	IC	IR	LS	AN	
49.19								
49.20	(26) Lindane (c), µg/L (Hexachlorocyclohexane, gamma-)							
49.21	0.036	4.4*	8.8*	--	--	--	--	--
49.22	(27) Methylene chloride (c), µg/L (Dichloromethane)							
49.23	1,940	13,875	27,749	--	--	--	--	--

50.1 (28) Metolachlor

50.2 23 271 543 -- -- -- --

50.3 (29) Naphthalene, µg/L

50.4 81 409 818 -- -- -- --

50.5 (30) Parathion, µg/L

50.6 0.013 0.07 0.13 -- -- -- --

50.7 **2B&D** **2B&D** **2B&D** **3A/3B/3C** **4A** **4B** **5**
50.8 CS MS FAV EC IR LS AN

50.9 _____

50.10 (31) Pentachlorophenol, µg/L

50.11 5.5 15 30 -- -- -- --

50.12 Class 2B and 2D standards are pH dependent, except that the CS will not exceed 5.5 µg/L.
50.13 Pentachlorophenol values shown are for a pH of 7.5 only. See part 7050.0222, subpart 4,
50.14 for examples at other pH values and equations to calculate pentachlorophenol standards for
50.15 any pH value.

50.16 (32) Phenanthrene, µg/L

50.17 3.6 32 64 -- -- -- --

50.18 (33) Phenol, µg/L

50.19 123 2,214 4,428 -- -- -- --

50.20 (34) Polychlorinated biphenyls (c), ng/L (PCBs, total)

50.21 0.029 1,000* 2,000* -- -- -- --

50.22 (35) 1,1,2,2-Tetrachloroethane (c), µg/L

50.23 13 1,127 2,253 -- -- -- --

51.1	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5
51.2	CS	MS	FAV	IC	IR	LS	AN

51.3

51.4 (36) Tetrachloroethylene (c), µg/L

51.5	8.9	428	857	--	--	--	--
------	-----	-----	-----	----	----	----	----

51.6 (37) Toluene, µg/L

51.7	253	1,352	2,703	--	--	--	--
------	-----	-------	-------	----	----	----	----

51.8 (38) Toxaphene (c), ng/L

51.9	1.3	730*	1,500*	--	--	--	--
------	-----	------	--------	----	----	----	----

51.10 (39) 1,1,1-Trichloroethane, µg/L

51.11	329	2,957	5,913	--	--	--	--
-------	-----	-------	-------	----	----	----	----

51.12 (40) 1,1,2-Trichloroethylene (c), µg/L

51.13	120	6,988	13,976	--	--	--	--
-------	-----	-------	--------	----	----	----	----

51.14	2B&D	2B&D	2B&D	3A/3B/3C	4A	4B	5
51.15	CS	MS	FAV	IC	IR	LS	AN

51.16

51.17 (41) 2,4,6-Trichlorophenol, µg/L

51.18	2.0	102	203	--	--	--	--
-------	-----	-----	-----	----	----	----	----

51.19 (42) Vinyl chloride (c), µg/L

51.20	9.2	--*	--*	--	--	--	--
-------	-----	-----	-----	----	----	----	----

51.21 (43) Xylenes, total, µg/L

51.22	166	1,407	2,814	--	--	--	--
-------	-----	-------	-------	----	----	----	----

[For text of items D and E, see Minnesota Rules]

52.1 F. For chloride, maintain background if background is greater than the class 2B
52.2 chloride standard. See part 7050.0222, subpart 6.

52.3 F. G. For radioactive materials, see parts 7050.0222, subpart 4; and 7050.0224,
52.4 subparts 2 and 3.

52.5 G. H. Temperature must not exceed:

52.6 (1) Class 2B standard: five degrees Fahrenheit above natural in streams and
52.7 three degrees Fahrenheit above natural in lakes, based on monthly average of maximum
52.8 daily temperature, except in no case shall it exceed the daily average temperature of 86
52.9 degrees Fahrenheit; and

52.10 (2) Class 2D standard: maintain background as defined in part 7050.0222,
52.11 subpart 6.

52.12 *[For text of subpart 6, see Minnesota Rules]*

52.13 Subp. 6a. **Limited resource value waters and associated use classes.**

52.14 A. WATER QUALITY STANDARDS APPLICABLE TO USE CLASSES 3C, 4A, 4B,
52.15 5, AND 7 SURFACE WATERS

	7	3C	4A	4B	5
52.16 LIMITED					
52.17 RESOURCE					
52.18 VALUE					

52.20

52.21 (1) Bicarbonates (HCO_3^-), meq/L

52.22	--	--	5	--	--
-------	----	----	---	----	----

52.23 (2) (1) Boron, $\mu\text{g}/\text{L}$

52.24	--	--	500	--	--
-------	----	----	-----	----	----

53.1 ~~(3)~~ Chloride, mg/L

53.2 -- 250 -- -- --

53.3 ~~(4)(2)~~ Escherichia (E.) coli bacteria, organisms/100 mL

53.4 See item B -- -- -- --

53.5 ~~(5)~~ Hardness, Ca+Mg as CaCO₃, mg/L

53.6 -- 500 -- -- -- --

53.7 7 3C 4A 4B 5
 53.8 LIMITED 1C 1R LS AN
 53.9 RESOURCE
 53.10 VALUE

53.11 _____

53.12 ~~(6)(3)~~ Hydrogen sulfide, mg/L

53.13 -- -- -- -- 0.02

53.14 (4) Nitrate + nitrite as N, mg/L

53.15 -- -- 100 --

53.16 ~~(7)(5)~~ Oxygen, dissolved, mg/L

53.17 See item C -- -- -- --

53.18 ~~(8)(6)~~ pH minimum, su

53.19 6.0 6.0 6.0 -- 6.0 6.0

53.20 ~~(9)(7)~~ pH maximum, su

53.21 9.0 9.0 8.5 -- 9.0 9.0

53.22 ~~(10)(8)~~ Radioactive materials

53.23 -- -- See item D See item D --

54.1 **7** **3C** **4A** **4B** **5**
 54.2 **LIMITED** **1C** **1R** **LS** **AN**
 54.3 **RESOURCE**
 54.4 **VALUE**

54.5

54.6 **(11) Salinity, total, mg/L**54.7 -- -- -- **1,000**54.8 **(12) Sodium, meq/L**

54.9 -- -- **60% of**
 54.10 **total**
 54.11 **cations**

54.12 **(13) Specific conductance at 25°C, $\mu\text{mhos}/\text{cm}$** 54.13 -- -- **1,000**54.14 **(9) Sulfate, mg/L**54.15 -- -- **600**54.16 **(14) (10) Sulfates, wild rice present, mg/L**54.17 -- -- **10**54.18 **(15) Total dissolved salts, mg/L**54.19 -- -- **700**54.20 **(11) Total dissolved solids, mg/L**54.21 -- -- **3,000**54.22 **(16) (12) Toxic pollutants**

54.23 See item E -- -- --

54.24 **[For text of items B to E, see Minnesota Rules]**

55.1 [For text of subpart 7, see Minnesota Rules]

55.2 **7050.0222 SPECIFIC WATER QUALITY STANDARDS FOR CLASS 2 WATERS**
55.3 **OF THE STATE; AQUATIC LIFE AND RECREATION.**

55.4 [For text of subparts 1 to 5, see Minnesota Rules]

55.5 Subp. 6. **Class 2D waters; wetlands.**

55.6 A. The quality of class 2D wetlands shall be such as to permit the propagation
55.7 and maintenance of a healthy community of aquatic and terrestrial species indigenous to
55.8 wetlands, and their habitats. Wetlands also add to the biological diversity of the landscape.
55.9 These waters shall be suitable for boating and other forms of aquatic recreation for which
55.10 the wetland may be usable. The standards for class 2B waters listed under subpart 4 shall
55.11 apply to these waters except as listed below:

55.12	Substance, Characteristic, or Pollutant	Class 2D standard
55.13	Oxygen, dissolved	If background is less than 5.0 mg/L as a daily minimum, maintain background
55.14		
55.15	pH	Maintain background
55.16	Temperature	Maintain background
55.17	<u>Chloride (Cl)</u>	<u>If background is greater than the class 2B chloride standard, maintain background</u>
55.18		
55.19	<u>Settleable solids</u>	<u>Must not be allowed in concentrations sufficient to create the potential for significant adverse impacts on one or more designated uses</u>
55.20		
55.21		
55.22		

55.23 [For text of item B, see Minnesota Rules]

55.24 C. Activities in wetlands which involve the normal farm practices of planting with
55.25 annually seeded crops or the utilization of a crop rotation seeding of pasture grasses or
55.26 legumes, including the recommended applications of fertilizer and pesticides, are excluded
55.27 from the standards in this subpart and the wetland standards in item A and parts 7050.0224,

56.1 ~~subpart 4;~~ 7050.0225, subpart 2~~½~~, and 7050.0227. All other activities in these wetlands must
56.2 meet water quality standards.

56.3 *[For text of subparts 7 to 9, see Minnesota Rules]*

56.4 **7050.0223 SPECIFIC WATER QUALITY STANDARDS STANDARD FOR CLASS**
56.5 **3 WATERS OF THE STATE; INDUSTRIAL CONSUMPTION.**

56.6 Subpart 1. **General.** The ~~numeric and narrative water quality standards~~ standard in
56.7 this part ~~prescribe prescribes~~ the qualities or properties of the waters of the state that are
56.8 necessary for the industrial consumption designated public uses and benefits. ~~If the standards~~
56.9 ~~in this part are exceeded in waters of the state that have the class 3 designation, it is~~
56.10 ~~considered indicative of a polluted condition which is actually or potentially deleterious,~~
56.11 ~~harmful, detrimental, or injurious with respect to the designated uses.~~

56.12 Subp. 2. **Class 3A_3 waters; industrial consumption.** The quality of class 3A_3
56.13 waters of the state ~~shall~~ must be such as to permit their use ~~without chemical treatment,~~
56.14 ~~except softening for groundwater, for most industrial purposes, except food processing and~~
56.15 ~~related uses, for which a high quality of water is required. The following standards shall~~
56.16 ~~not be exceeded in the waters of the state: for industrial purposes to avoid severe fouling,~~
56.17 ~~corrosion, or scaling. If the standard in this part is exceeded in waters of the state that have~~
56.18 ~~the class 3 designation, it is considered indicative of a polluted condition that is actually or~~
56.19 ~~potentially deleterious, harmful, detrimental, or injurious with respect to the designated use.~~
56.20 No sewage, industrial waste, or other wastes from point or nonpoint sources, treated or
56.21 untreated, shall be discharged into or permitted by any person to gain access to any waters
56.22 of the state classified for industrial purposes so as to cause any material impairment of their
56.23 use as a source of industrial water supply.

56.24 <u>Substance, Characteristic, or Pollutant</u>	56.24 <u>Class 3A Standard</u>
56.25 <u>Chlorides (Cl)</u>	56.25 <u>50 mg/L</u>
56.26 <u>Hardness, Ca + Mg as CaCO₃</u>	56.26 <u>50 mg/L</u>

57.1	pH, minimum value	6.5
57.2	pH, maximum value	8.5
57.3	Subp. 3. [See repealer.]	
57.4	Subp. 4. [See repealer.]	
57.5	Subp. 5. [See repealer.]	
57.6	Subp. 6. [See repealer.]	

**7050.0224 SPECIFIC WATER QUALITY STANDARDS FOR CLASS 4 WATERS
OF THE STATE; AGRICULTURE AND WILDLIFE.**

57.9 *[For text of subpart 1, see Minnesota Rules]*

57.10 Subp. 2. **Class 4A waters.** The quality of class 4A waters of the state shall must be
57.11 such as to permit their use for irrigation without significant damage or adverse effects upon
57.12 any crops or vegetation usually grown in the waters or area, including truck garden crops.
57.13 The following standards shall be used as a guide in determining the suitability of the waters
57.14 for such uses, together with the recommendations contained in Handbook 60 published by
57.15 the Salinity Laboratory of the United States Department of Agriculture, and any revisions,
57.16 amendments, or supplements to it: In addition, the following standards apply:

57.17	Substance, Characteristic, or	
57.18	Pollutant	Class 4A Standard
57.19	Bicarbonates (HCO_3^-)	5 milliequivalents per liter
57.20	Boron (B)	0.5 mg/L
57.21	pH, minimum value	6.0
57.22	pH, maximum value	8.5
57.23	Specific conductance	1,000 micromhos per centimeter at 25°C
57.24	Total dissolved salts	700 mg/L
57.25	Sodium (Na)	60% of total cations as milliequivalents per liter

58.1	Sulfates (SO_4)	10 mg/L, applicable to water used for production of wild rice during periods when the rice may be susceptible to damage by high sulfate levels.
58.2		
58.3		
58.4	Radioactive materials	Not to exceed the lowest concentrations permitted to be discharged to an uncontrolled environment as prescribed by the appropriate authority having control over their use.
58.5		
58.6		
58.7		
58.8	<u>Items A and B apply to the quality of class 4A waters of the state, with the exception of the numeric sulfate standard applicable to waters used for production of wild rice.</u>	
58.9		
58.10	<u>A. Determining whether irrigation water quality would cause significant damage or adverse effects must consider the following items in the area where the water is applied for irrigation: crop types, soil types, climate, and irrigation practices.</u>	
58.11		
58.12		
58.13	<u>B. Irrigation water quality must be protected over the growing season as an average.</u>	
58.14	Subp. 3. Class 4B waters; livestock and wildlife watering. The quality of class 4B waters of the state shall <ins>must</ins> be such as to permit their use by livestock and wildlife for <ins>watering</ins> without inhibition or injurious effects. The standards for substances, characteristics, or pollutants given below shall <ins>must</ins> not be exceeded, <ins>as a 30-day average</ins> , in the waters of the state:	
58.15		
58.16		
58.17		
58.18		
58.19	Substance, Characteristic, or Pollutant	Class 4B Standard
58.20	pH, minimum value	6.0
58.21	pH, maximum value	9.0
58.22	<u>Total salinity</u>	<u>1,000 mg/L</u>
58.23	<u>Total dissolved solids</u>	<u>3,000 mg/L</u>
58.24	<u>Nitrate + nitrite (as $\text{NO}_3+\text{NO}_2-\text{N}$)</u>	<u>100 mg/L</u>
58.25	<u>Sulfate (SO_4)</u>	<u>600 mg/L</u>
58.26	Radioactive materials	Not to exceed the lowest concentrations permitted to be discharged to an uncontrolled
58.27		

59.1 environment as prescribed by the appropriate
59.2 authority having control over their use.

59.3 Toxic substances None at levels harmful either directly or
59.4 indirectly

59.5 Additional selective limits may be imposed for any specific waters of the state as
59.6 needed.

59.7 Subp. 4. [See repealer.]

7050.0415 DESIGNATED BENEFICIAL USES OF WATERS AND WETLANDS.

59.9 **Subpart 1. Multiple classifications.** All surface waters of the state are classified in
59.10 more than one beneficial use class and all the water quality standards for each of the
59.11 beneficial use classes apply. If the water quality standard for a particular parameter is
59.12 different among applicable classes, the most restrictive of the standards applies.

59.13 **Subp. 2. Determining the beneficial use classification.** All waters of the state, except
59.14 wetlands, are generally classified as class 2B, 3, 4A, 4B, 5, and 6 waters. Wetlands are
59.15 generally classified as class 2D, 3, 4A, 4B, 5, and 6 waters. Specific beneficial use
59.16 classifications are described in subparts 3 and 4.

59.17 **Subp. 3. Listed waters and wetlands.** The waters of the state listed in part 7050.0470
59.18 are classified as specified in that part. Those waters of the state, including wetlands, that
59.19 are specifically listed in part 7050.0470 have the beneficial use classifications listed in part
59.20 7050.0470. Part 7050.0470 reflects any changes to the beneficial use classifications of a
59.21 water body that differ from the default classifications under subpart 4, based on a specific
59.22 review of a water body's existing or attainable uses.

59.23 Subp. 4. Unlisted waters and wetlands.

59.24 A. Except as provided in subitems (1) and (2), all surface waters of the state that
59.25 are not listed in part 7050.0470 and that are not wetlands as defined in part 7050.0186,

60.1 subpart 1a, are classified as class 2B, 3, 4A, 4B, 5, and 6 waters. Unlisted lotic waters are
60.2 also assigned the beneficial use subclass designator "g" to the class 2B designator.

60.3 (1) Boundary Waters Canoe Area Wilderness:

60.4 (a) All streams in the Boundary Waters Canoe Area Wilderness
60.5 [11/5/84P] not listed in part 7050.0470 are classified as class 1B, 2Bdg, 3, 4A, 4B, 5, and
60.6 6 waters.

60.7 (b) All lakes in the Boundary Waters Canoe Area Wilderness [11/5/84P]
60.8 not listed in part 7050.0470 are classified as class 1B, 2Bd, 3, 4A, 4B, 5, and 6 waters.

60.9 (c) All wetlands in the Boundary Waters Canoe Area Wilderness
60.10 [11/5/84P] are classified as class 2D, 3, 4A, 4B, 5, and 6 waters.

60.11 (2) Voyageurs National Park:

60.12 (a) All streams in Voyageurs National Park [11/5/84P] not listed in part
60.13 7050.0470 are classified as class 2Bg, 3, 4A, 4B, 5, and 6 waters.

60.14 (b) All lakes in Voyageurs National Park [11/5/84P] not listed in part
60.15 7050.0415 are classified as class 2B, 3, 4A, 4B, 5, and 6 waters.

60.16 (c) All wetlands in Voyageurs National Park [11/5/84P] are classified
60.17 as class 2D, 3, 4A, 4B, 5, and 6 waters.

60.18 B. Those waters of the state that are wetlands as defined in part 7050.0186, subpart
60.19 1a, and that are not listed in part 7050.0470 are classified as class 2D, 3, 4A, 4B, 5, and 6
60.20 waters.

60.21 **7050.0420 COLD WATER HABITAT WATERS.**

60.22 [For text of items A to C, see Minnesota Rules]

61.1 D. Unless otherwise listed in part 7050.0470, all class 2A, 2Ae, or 2Ag waters
61.2 listed in part 7050.0470 are also classified as class 1B, 3B 3, 4A, 4B, 5, and 6 waters.

61.3 **7050.0460 WATERS SPECIFICALLY CLASSIFIED; EXPLANATION OF**
61.4 **LISTINGS IN PART 7050.0470.**

61.5 Subpart 1. **Explanation of listings.** The waters of the state listed in part 7050.0470
61.6 are classified as specified. The location of lakes, wetlands, calcareous fens, and scientific
61.7 and natural areas are described by township, range, and section. Specific stream stretches
61.8 are described by township, range, and section; stream confluence; geographic coordinates;
61.9 road crossing; some other recognizable landmark; or a combination of these descriptors.
61.10 Streams and rivers are listed by the eight-digit hydrologic unit code (HUC) of the major
61.11 watersheds in part 7050.0469 in which the streams and rivers are located. The tables that
61.12 specify the applicable beneficial uses for the stream and river reaches are incorporated by
61.13 reference in part 7050.0470. Any community listed in part 7050.0470 is the community
61.14 nearest the water classified, and is included solely to assist in identifying the water. Most
61.15 waters of the state are not specifically listed in part 7050.0470. See parts ~~7050.0425~~ and
61.16 7050.0430 7050.0415 for the classifications of waters not listed.

61.17 Subp. 2. **Outstanding international waters.** The waters listed in part 7050.0470,
61.18 subpart 1, that are not designated as outstanding resource value waters or classified as class
61.19 7 waters are designated as outstanding international resource waters under part 7052.0300,
61.20 subpart 3. Unlisted waters classified in part 7050.0430 7050.0415 and unlisted wetlands
61.21 classified in part 7050.0425 7050.0415 that are located in the Lake Superior basin are also
61.22 designated as outstanding international resource waters under part 7052.0300, subpart 3.

61.23 *[For text of subpart 3, see Minnesota Rules]*

62.1 **7050.0470 CLASSIFICATIONS FOR SURFACE WATERS IN MAJOR DRAINAGE
62.2 BASINS.**

62.3 Subpart 1. **Lake Superior basin.** The water-use classifications for the stream reaches
62.4 within each of the major watersheds in the Lake Superior basin listed in item A are found
62.5 in tables entitled "Beneficial Use Designations for Stream Reaches" published on the website
62.6 of the Minnesota Pollution Control Agency at
www.pca.state.mn.us/regulations/minnesota-rulemaking
62.7 www.pca.state.mn.us/regulations/incorporations-reference. The tables are incorporated by
62.8 reference and are not subject to frequent change. The date after each watershed listed in
62.9 item A is the publication date of the applicable table. The water-use classifications for the
62.10 other listed waters in the Lake Superior basin are as identified in items B to D. See ~~parts~~
62.11 ~~7050.0425 and 7050.0430 part 7050.0415~~ for the classifications of waters not listed.
62.12 Designated use information for water bodies can also be accessed through the agency's
62.13 Environmental Data Access (<http://www.pca.state.mn.us/quick-links/eda-surface-water-data>).
62.14

62.15 *[For text of item A, see Minnesota Rules]*

62.16 B. Lakes:

- 62.17 (1) *Alder Lake, 16-0114-00, [11/5/84P] (T.64, R.1E): 1B, 2A, ~~3B~~ 3, 4A,
62.18 4B, 5, 6;
- 62.19 (2) *Alton Lake, 16-0622-00, [11/5/84P] (T.62, 63, R.4, 5): 1B, 2A, ~~3B~~ 3,
62.20 4A, 4B, 5, 6;
- 62.21 (3) Artichoke Lake, 69-0623-00, [WR] (T.52, R.17, S.17, 18, 19, 20): 2B,
62.22 ~~3B~~ 3, 4A, 4B, 5, 6;
- 62.23 (4) Bath Lake, 16-0164-00, (T.62, R.1W, S.5, 6; T.63, R.1W, S.31, 32): 1B,
62.24 2A, ~~3B~~ 3, 4A, 4B, 5, 6;

- 63.1 (5) Bean Lake (lower Twin), 38-0409-00, (T.56, R.8W, S.25, 26): 1B, 2A,
63.2 3B 3, 4A, 4B, 5, 6;
- 63.3 (6) Bear Lake (see Twin Lake, upper);
- 63.4 (7) Bearskin Lake, East, 16-0146-00, (T.64, R.1E, 1W): 1B, 2A, 3B 3, 4A,
63.5 4B, 5, 6;
- 63.6 (8) *Bearskin Lake, West, 16-0228-00, [3/7/88R] (T.64, 65, R.1): 1B, 2A,
63.7 3B 3, 4A, 4B, 5, 6;
- 63.8 (9) *Bench Lake, 16-0063-00, [11/5/84P] (T.64, 2E, S.6): 1B, 2A, 3B 3, 4A,
63.9 4B, 5, 6;
- 63.10 (10) Benson Lake, 38-0018-00, (T.58, R.6W, S.29): 1B, 2A, 3B 3, 4A, 4B,
63.11 5, 6;
- 63.12 (11) *Birch Lake, 16-0247-00, [3/7/88R] (T.65, R.1, 2): 1B, 2A, 3B 3, 4A,
63.13 4B, 5, 6;
- 63.14 (12) *Black Lake, 58-0001-00, [3/7/88P] (T.45, R.15): 1B, 2Bd, 3B 3, 4A,
63.15 4B, 5, 6;
- 63.16 (13) Bluebill Lake, 38-0261-00, [WR] (T.59, R.7, S.15): 2B, 3B 3, 4A, 4B,
63.17 5, 6;
- 63.18 (14) Bogus Lake, 16-0050-00, (T.62, R.2E, S.12): 1B, 2A, 3B 3, 4A, 4B, 5,
63.19 6;
- 63.20 (15) Bone Lake, 38-0065-00, (T.61, R.6W, S.13, 14): 1B, 2A, 3B 3, 4A, 4B,
63.21 5, 6;
- 63.22 (16) Bow Lake, 16-0211-00, (T.64, R.1W, S.15): 1C, 2Bd, 3C 3, 4A, 4B, 5,
63.23 6;

- 64.1 (17) Boys Lake, 16-0044-00, (T.62, R.2E, S.5, 8): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5,
64.2 6;
- 64.3 (18) Breda Lake, 69-0037-00, [WR] (T.56, R.12, S.16): 2B, ~~3B~~ 3, 4A, 4B,
64.4 5, 6;
- 64.5 (19) Briar Lake, 69-0128-00, (T.53, R.13W, S.14, 15, 23): 1B, 2A, ~~3B~~ 3, 4A,
64.6 4B, 5, 6;
- 64.7 (20) *Brule Lake, 16-0348-00, [11/5/84P] (T.63, R.2, 3): 1B, 2A, ~~3B~~ 3, 4A,
64.8 4B, 5, 6;
- 64.9 (21) Cabin Lake, 38-0260-00, [WR] (T.59, R.7, S.13, 14, 23, 24): 2B, ~~3B~~ 3,
64.10 4A, 4B, 5, 6;
- 64.11 (22) Canton Mine Pit Lake, 69-1294-00, (T.58, R.16, S.2, 3): 1C, 2Bd, ~~3C~~
64.12 3, 4A, 4B, 5, 6;
- 64.13 (23) Caribou Lake, 16-0360-00, [WR] (T.60, R.3W, S.1, 2, 11, 12; T.61,
64.14 R.3W, S.35, 36): 2B, ~~3B~~ 3, 4A, 4B, 5, 6;
- 64.15 (24) Carrot Lake, 16-0071-00, (T.64, R.2E, S.17): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5,
64.16 6;
- 64.17 (25) Cedar Lake, 69-0431-00, (T.58, R.15W, S.20): 1B, 2Bd, ~~3B~~ 3, 4A, 4B,
64.18 5, 6;
- 64.19 (26) Chester Lake, 69-0033-00, (T.64, R.3E, S.32, 33): 1B, 2A, ~~3B~~ 3, 4A,
64.20 4B, 5, 6;
- 64.21 (27) Christine Lake, 16-0373-00, [WR] (T.61, R.3W, S.28, 29, 32): 2B, ~~3B~~
64.22 3, 4A, 4B, 5, 6;
- 64.23 (28) Clearwater Lake (Clear Lake), 69-0397-00, (T.52, R.15W, S.23): 1B,
64.24 2A, 3B 3, 4A, 4B, 5, 6;

- 65.1 (29) *Clearwater Lake (Emby Lake), 16-0139-00, [11/5/84P] (T.65, R.1E):
65.2 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 65.3 (30) Colby Lake, 69-0249-00, (T.58, R.14): 1B, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 65.4 (31) *Cone Lake, 16-0412-00, North, [11/5/84P] (T.63, 64, R.3): 1B, 2A,
65.5 ~~3B~~ 3, 4A, 4B, 5, 6;
- 65.6 (32) Corona Lake, 09-0048-00, (T.48, R.19W, S.11, 12): 1B, 2A, ~~3B~~ 3, 4A,
65.7 4B, 5, 6;
- 65.8 (33) Corsica Mine Pit Lake, 69-1316-00, (T.58, R.16, S.18): 1C, 2Bd, ~~3C~~ 3,
65.9 4A, 4B, 5, 6;
- 65.10 (34) Crosscut Lake, 38-0257-00, (T.59, R.7W, S.7, 18): 1B, 2A, ~~3B~~ 3, 4A,
65.11 4B, 5, 6;
- 65.12 (35) *Crystal Lake, 16-0090-00, [11/5/84P] (T.64, R.1E, 2E): 1B, 2A, ~~3B~~ 3,
65.13 4A, 4B, 5, 6;
- 65.14 (36) *Daniels Lake, 16-0150-00, [11/5/84P] (T.65, R.1E, 1W): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 65.15 (37) *Davis Lake, 16-0435-00, [11/5/84P] (T.64, R.3): 1B, 2A, ~~3B~~ 3, 4A,
65.17 4B, 5, 6;
- 65.18 (38) Devilfish Lake, 16-0029-00, (T.64, R.3E): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 65.19 (39) Divide (Towhey) Lake, 38-0256-00, (T.59, R.7W, S.7, 8): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 65.21 (40) Duke Lake, 16-0111-00, (T.63, R.1E, S.30): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5,
65.22 6;

- 66.1 (41) *Duncan Lake, 16-0232-00, [11/5/84P] (T.65, R.1): 1B, 2A, 3B 3, 4A,
66.2 4B, 5, 6;
- 66.3 (42) *Dunn Lake, 16-0245-00, [11/5/84P] (T.65, R.1, 2): 1B, 2A, 3B 3, 4A,
66.4 4B, 5, 6;
- 66.5 (43) East Lake, 38-0020-00, (T.59, R.6W, S.1, 2): 1B, 2A, 3B 3, 4A, 4B, 5,
66.6 6;
- 66.7 (44) *Echo Lake, 38-0028-00, [3/7/88R] (T.59, R.6, S.14, 15, 22, 23): 1B,
66.8 2A, 3B 3, 4A, 4B, 5, 6;
- 66.9 (45) Elbow Lake, Little, 69-1329-00, (T.57, R.18W, S.9, 10, 16): 1B, 2A,
66.10 3B 3, 4A, 4B, 5, 6;
- 66.11 (46) Embarrass Mine Pit (Sabin Lake or Lake Mine), 69-0429-00, (T.58,
66.12 R.15W, S.5, 6): 1B, 2A, 3B; 3, 4A, 4B, 5, 6
- 66.13 (47) Esther Lake, 16-0023-00, (T.63, R.3E, S.6; T.64, R.3E, S.31): 1B, 2A,
66.14 3B 3, 4A, 4B, 5, 6;
- 66.15 (48) *Fan Lake (West Lily), 16-0084-00, [11/5/84P] (T.65, R.2E): 1B, 2Bd,
66.16 3A 3, 4A, 4B, 5, 6;
- 66.17 (49) Feather Lake, 16-0905-00, (T.61, R.5W, S.35): 1B, 2A, 3B 3, 4A, 4B,
66.18 5, 6;
- 66.19 (50) Flour Lake, 16-0147-00, (T.64, R.1E, 1W): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 66.20 (51) Fourmile Lake, 16-0639-00, [WR] (T.60, R.5W, S.4, 8, 9, 10, 16, 17):
66.21 2B, 3B 3, 4A, 4B, 5, 6;
- 66.22 (52) Fowl Lake, North, 16-0036-00, (T.64, 65, R.3E): 1B, 2Bd, 3A 3, 4A,
66.23 4B, 5, 6;

- 67.1 (53) Fowl Lake, South, 16-0034-00, (T.64, 65, R.3E): 1B, 2Bd, ~~3A~~3, 4A,
67.2 4B, 5, 6;
- 67.3 (54) Fraser Mine Pit Lake, (T.58, R.20, S.23): 1C, 2Bd, ~~3C~~3, 4A, 4B, 5, 6,
67.4 until the city of Chisholm no longer uses Fraser Mine Pit Lake as a water supply source for
67.5 its public water system, and then the classification is identified in part ~~7050.0430~~7050.0415,
67.6 subpart 4;
- 67.7 (55) *Gadwall Lake (Gadwell Lake), 16-0060-00, [11/5/84P] (T.64, R.2E,
67.8 S.3): 1B, 2A, ~~3B~~3, 4A, 4B, 5, 6;
- 67.9 (56) *Gaskin Lake, 16-0319-00, [11/5/84P] (T.64, R.2): 1B, 2A, ~~3B~~3, 4A,
67.10 4B, 5, 6;
- 67.11 (57) *Gogebic Lake, 16-0087-00, [11/5/84P] (T.65, R.2E, S.30, 31): 1B, 2A,
67.12 ~~3B~~3, 4A, 4B, 5, 6;
- 67.13 (58) Goldeneye (Duck) Lake, 38-0029-00, (T.59, R.6W, S.15): 1B, 2A, ~~3B~~3,
67.14 3, 4A, 4B, 5, 6;
- 67.15 (59) *Greenwood Lake, 16-0077-00, [3/7/88R] (T.64, R.2E): 1B, 2A, ~~3B~~3,
67.16 4A, 4B, 5, 6;
- 67.17 (60) Hay Lake, 69-0435-00, [WR] (T.59, R.15, S.8): 2B, ~~3B~~3, 4A, 4B, 5, 6;
- 67.18 (61) Hungry Jack Lake, 16-0227-00, (T.64, 65, R.1): 1B, 2A, ~~3B~~3, 4A, 4B,
67.19 5, 6;
- 67.20 (62) Jim Lake (Jerry Lake), 16-0135-00, (T.64, R.1E): 1B, 2A, ~~3B~~3, 4A,
67.21 4B, 5, 6;
- 67.22 (63) Judson Mine Pit, 69-1295-00, (T.58, R.19W, S.20, 29): 1B, 2A, ~~3B~~3,
67.23 4A, 4B, 5, 6;

- 68.1 (64) Junco Lake, 16-0159-00, (T.62, R.1W, S.11, 12, 13): 1B, 2A, 3B 3, 4A,
68.2 4B, 5, 6;
- 68.3 (65) *Kemo Lake, 16-0188-00, [3/7/88R] (T.63, R.1): 1B, 2A, 3B 3, 4A, 4B,
68.4 5, 6;
- 68.5 (66) Kimball Lake, 16-0045-00, (T.62, R.2E, S.7, 8, 17): 1B, 2A, 3B 3, 4A,
68.6 4B, 5, 6;
- 68.7 (67) Leo Lake, 16-0198-00, (T.64, R.1W, S.4, 5): 1B, 2A, 3B 3, 4A, 4B, 5,
68.8 6;
- 68.9 (68) Lieung (Lieuna) Lake, 69-0123-00, [WR] (T.53, R.13, S.3, 4, 9, 10):
68.10 2B, 3B 3, 4A, 4B, 5, 6;
- 68.11 (69) *Lily Lakes (Vaseux Lake and Fan Lake), 16-0083-00 and 16-0084-00,
68.12 [11/5/84P] (T.65, R.2E): 1B, 2Bd, 3A 3, 4A, 4B, 5, 6;
- 68.13 (70) Lima Lake, 16-0226-00, (T.64, R.1W, S.35): 1B, 2A, 3B 3, 4A, 4B, 5,
68.14 6;
- 68.15 (71) *Lizz Lake, 16-0199-00, [11/5/84P] (T.64, R.1W, S.7, 18): 1B, 2A, 3B
68.16 3, 4A, 4B, 5, 6;
- 68.17 (72) Loaine (Sand) Lake, 69-0016-00, (T.54, R.12W, S.16, 17): 1B, 2A, 3B
68.18 3, 4A, 4B, 5, 6;
- 68.19 (73) Loft Lake, 16-0031-00, (T.64, R.3E, S.21): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 68.20 (74) Long Lake, 69-0044-00, [WR] (T.57, R.12, S.4, 5; T.58, R.12, S.32,
68.21 33): 2B, 3B 3, 4A, 4B, 5, 6;
- 68.22 (75) Margaret Lake, 16-0896-00, (T.64, R.3E, S.27, 28, 33, 34): 1B, 2A, 3B
68.23 3, 4A, 4B, 5, 6;

- 69.1 (76) Marsh Lake, 16-0488-00, [WR] (T.62, R.4W, S.22, 23, 27, 28): 2B, ~~3B~~
69.2 3, 4A, 4B, 5, 6;
- 69.3 (77) McFarland Lake, 16-0027-00, (T.64, R.3E): 1B, 2A, ~~3B~~3, 4A, 4B, 5,
69.4 6;
- 69.5 (78) Mesabi (Missabe) Mountain Mine Pit Lake, 69-1292-00, (T.58, R.17,
69.6 S.8): 1C, 2Bd, ~~3C~~3, 4A, 4B, 5, 6;
- 69.7 (79) Mink Lake, 16-0046-00, (T.62, R.2E, S.8): 1B, 2A, ~~3B~~3, 4A, 4B, 5, 6;
- 69.8 (80) Mirror Lake, 69-0234-00, (T.52, R.14W, S.19, 30): 1B, 2A, ~~3B~~3, 4A,
69.9 4B, 5, 6;
- 69.10 (81) *Misquah Lake, 16-0225-00, [11/5/84P] (T.64, R.1): 1B, 2A, ~~3B~~3, 4A,
69.11 4B, 5, 6;
- 69.12 (82) Moore Lake, 16-0489-00, [WR] (T.62, R.4W, S.23, 24): 2B, ~~3B~~3, 4A,
69.13 4B, 5, 6;
- 69.14 (83) Moosehorn Lake, 16-0015-00, (T.63, R.3E, S.36; T.63, R.4E, S.31): 1B,
69.15 2A, 3B3, 4A, 4B, 5, 6;
- 69.16 (84) *Moose Lake, 16-0043-00, [11/5/84P] (T.65, R.2E, 3E): 1B, 2A, ~~3A~~3,
69.17 4A, 4B, 5, 6;
- 69.18 (85) Morton Mine Pit Lake, 69-1310-00, (T.57, R.21, S.10, 11, 14): 1C, 2Bd,
69.19 ~~3C~~3, 4A, 4B, 5, 6;
- 69.20 (86) *Moss Lake, 16-0234-00, [3/7/88R] (T.65, R.1): 1B, 2A, ~~3B~~3, 4A, 4B,
69.21 5, 6;
- 69.22 (87) *Mountain Lake, 16-0093-00, [11/5/84P] (T.65, R.1E, 2E): 1B, 2A, ~~3B~~3,
69.23 3, 4A, 4B, 5, 6;

- 70.1 (88) Muckwa Lake, 16-0105-00, (T.63, R.1E, S.21, 28): 1B, 2A, 3B 3, 4A,
70.2 4B, 5, 6;
- 70.3 (89) *Mulligan Lake, 16-0389-00, [11/5/84P] (T.63, R.3W, S.1, 12): 1B, 2A,
70.4 3B 3, 4A, 4B, 5, 6;
- 70.5 (90) Musquash Lake, 16-0104-00, (T.63, R.1E, S.20, 28, 29): 1B, 2A, 3B 3,
70.6 4A, 4B, 5, 6;
- 70.7 (91) Normanna Lake, 69-0122-00, (T.52, R.13W, S.7, 8): 1B, 2A, 3B 3, 4A,
70.8 4B, 5, 6;
- 70.9 (92) Northern Light Lake, 16-0089-00, [WR] (T.63, R.2E, S.29, 30, 31, 32,
70.10 33; T.63, R.1E, S.25): 2B, 3B 3, 4A, 4B, 5, 6;
- 70.11 (93) Olga Lake, 16-0024-00, (T.63, R.3E, S.6; T.64, R.3E, S.31): 1B, 2A,
70.12 3B 3, 4A, 4B, 5, 6;
- 70.13 (94) Olson Lake, 16-0158-00, (T.62, R.1W, S.9, 16): 1B, 2A, 3B 3, 4A, 4B,
70.14 5, 6;
- 70.15 (95) *Onega Lake (Omega Lake), 16-0353-00, [11/5/84P] (T.64, R.2, 3): 1B,
70.16 2A, 3B 3, 4A, 4B, 5, 6;
- 70.17 (96) *Otto Lake, lower (South Otto), 16-0323-00, [11/5/84P] (T.64, R.2):
70.18 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 70.19 (97) Pancore (Lost) Lake, 16-0475-00, (T.61, R.4W, S.22, 27): 1B, 2A, 3B
70.20 3, 4A, 4B, 5, 6;
- 70.21 (98) Papoose Lake, 69-0024-00, [WR] (T.55, R.12, S.9): 2B, 3B 3, 4A, 4B,
70.22 5, 6;
- 70.23 (99) *Partridge Lake, 16-0233-00, [11/5/84P] (T.65, R.1): 1B, 2A, 3B 3, 4A,
70.24 4B, 5, 6;

- 71.1 (100) *Pemmican Lake, 16-0085-00, [11/5/84P] (T.65, R.2E, S.22): 1B, 2A,
71.2 3B 3, 4A, 4B, 5, 6;
- 71.3 (101) *Pike Lake, West, 16-0086-00, [11/5/84P] (T.65, R.2E): 1B, 2A, 3B
71.4 3, 4A, 4B, 5, 6;
- 71.5 (102) Pine Lake, 16-0194-00, (T.63, R.1W, S.35, 36): 1B, 2A, 3B 3, 4A, 4B,
71.6 5, 6;
- 71.7 (103) *Pine Lake, 16-0041-00, [11/5/84P] (T.64, 65, R.1E, 2E, 3E): 1B, 2A,
71.8 3B 3, 4A, 4B, 5, 6;
- 71.9 (104) Pine Mountain Lake, 16-0108-00, (T.63, R.1E, S.26, 27, 34, 35): 1B,
71.10 2A, 3B 3, 4A, 4B, 5, 6;
- 71.11 (105) Poplar Lake, 16-0239-00, (T.64N, R.1, 2W): 1C, 2Bd, 3C 3, 4A, 4B,
71.12 5, 6;
- 71.13 (106) *Ptarmigan Lake, 16-0183-00, [11/5/84P] (T.63, R.1, S.20, 29): 1B
71.14 2Bd, 3B 3, 4A, 4B, 5, 6;
- 71.15 (107) *Ram Lake, 16-0174-00, [11/5/84P] (T.63, R.1W, S.9, 10): 1B, 2A,
71.16 3B 3, 4A, 4B, 5, 6;
- 71.17 (108) Rice Lake, 16-0453-00, [WR] (T.61 R.3W, S.7; T.61, R.4W, S.2, 11,
71.18 12): 2B, 3B 3, 4A, 4B, 5, 6;
- 71.19 (109) *Rose Lake, 16-0230-00, [11/5/84P] (T.65, R.1): 1B, 2A, 3B 3, 4A,
71.20 4B, 5, 6;
- 71.21 (110) Round Island Lake, 38-0417-00 [WR] (T.59, R.8, S.12): 2B, 3B 3, 4A,
71.22 4B, 5, 6;
- 71.23 (111) Round Lake, 69-0048-00, [WR] (T.58, R.12, S.25, 26): 2B, 3B 3, 4A,
71.24 4B, 5, 6;

- 72.1 (112) St. James Mine Pit, 69-0428-00, (T.58, R.15W, S.3, 4): 1C, 2Bd, 3E
72.2 3, 4A, 4B, 5, 6;
- 72.3 (113) Saint Mary's Lake, 69-0651-00, (T.57, R.17, S.9, 16, 17): 1C, 2Bd, 3E
72.4 3, 4A, 4B, 5, 6;
- 72.5 (114) *Sawbill Lake, 16-0496-00, [11/5/84P] (T.62, 63, R.4): 1B, 2Bd, 3B
72.6 3, 4A, 4B, 5, 6;
- 72.7 (115) Section 8 Lake, 38-0258-00, (T.59, R.7W, S.8): 1B, 2A, 3B 3, 4A, 4B,
72.8 5, 6;
- 72.9 (116) Seven Beaver Lake, 69-0002-00, [WR] (T.58, R.11, 12): 2B, 3A 3, 4A,
72.10 4B, 5, 6;
- 72.11 (117) Shady, North, Lake, 16-0076-00, (T.64, R.2E, S.21, 22): 1B, 2A, 3B
72.12 3, 4A, 4B, 5, 6;
- 72.13 (118) Shoe Lake, 16-0080-00, (T.64, 2E, S.30): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 72.14 (119) Sled Lake, 16-0897-00, (T.63, R.1W, S.3): 1B, 2A, 3B 3, 4A, 4B, 5,
72.15 6;
- 72.16 (120) *Sock Lake, 16-0335-00, [11/5/84P] (T.65, R.2W, S.26): 1B, 2A, 3B
72.17 3, 4A, 4B, 5, 6;
- 72.18 (121) Sonju Lake, 38-0248-00, (T.58, R.7W, S.27, 28): 1B, 2A, 3B 3, 4A,
72.19 4B, 5, 6;
- 72.20 (122) *South Lake, 16-0244-00, [11/5/84P] (T.65, R.1, 2): 1B, 2A, 3B 3, 4A,
72.21 4B, 5, 6;
- 72.22 (123) Spring Hole Lake, 69-1372-00, (T.55, R.14W, S.14): 1B, 2A, 3B 3,
72.23 4A, 4B, 5, 6;

- 73.1 (124) *State Lake, 16-0293-00, [11/5/84P] (T.63, 64, R.2): 1B, 2A, 3B 3,
73.2 4A, 4B, 5, 6;

73.3 (125) Steer Lake, 38-0920-00, (T.60, R.6W, S.32): 1B, 2A, 3B 3, 4A, 4B, 5,
73.4 6;

73.5 (126) Stone Lake, 69-0686-00, [WR] (T.55, R.17, S.6; T.55, R.18, S.1; T.56,
73.6 R.17, S.31; T.56, R.18, S.36): 2B, 3B 3, 4A, 4B, 5, 6;

73.7 (127) Stone Lake (Skibo Lake), 69-0046-00, [WR] (T.58, R.12, S.17, 19,
73.8 20): 2B, 3B 3, 4A, 4B, 5, 6;

73.9 (128) Stone Lake (Murphy Lake or Tommila Lake), 69-0035-00, [WR] (T.56,
73.10 R.12, S.13, 24): 2B, 3B 3, 4A, 4B, 5, 6;

73.11 (129) *Superior, Lake, excluding the portions identified in subitem (130)
73.12 16-0001-00, [11/5/84R] (T.49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64,
73.13 R.14W-7E): 1B, 2A, 3A 3, 4A, 4B, 5, 6;

73.14 (130) *Superior, Lake, 16-0001-00, [3/9/98P] (those portions of Lake Superior
73.15 north of latitude 47 degrees, 57 minutes, 13 seconds, east of Hat Point, south of the
73.16 Minnesota-Ontario boundary, and west of the Minnesota-Michigan boundary): 1B, 2A, 3A
73.17 3, 4A, 4B, 5, 6;

73.18 (131) Swamp River (Reservoir), 16-0901-00, [WR] (T.63, R.4E, S.4; T.64,
73.19 R.4E, S.33): 2B, 3B 3, 4A, 4B, 5, 6;

73.20 (132) *Swan Lake, 16-0268-00, [11/5/84P] (T.63, R.2): 1B, 2A, 3B 3, 4A,
73.21 4B, 5, 6;

73.22 (133) Talus Lake, 16-0187-00, (T.63, R.1W, S.26, 27): 1B, 2A, 3B 3, 4A,
73.23 4B, 5, 6;

- 74.1 (134) Thompson Lake, 16-0160-00, (T.62, R.1W, S.19, 20, 29, 30): 1B, 2A,
74.2 3B 3, 4A, 4B, 5, 6;
- 74.3 (135) Thrasher Lake, 16-0192-00, (T.63, R.1W, S.31): 1B, 2A, 3B 3, 4A,
74.4 4B, 5, 6;
- 74.5 (136) Thrush Lake, 16-0191-00, (T.63, R.1W, S.31): 1B, 2A, 3B 3, 4A, 4B,
74.6 5, 6;
- 74.7 (137) *Topper Lake, 16-0336-00, [11/5/84P] (T.65, R.2W, S.27): 1B, 2A,
74.8 3B 3, 4A, 4B, 5, 6;
- 74.9 (138) *Trout Lake, 16-0049-00, [3/7/88R] (T.62, R.2E): 1B, 2A, 3B 3, 4A,
74.10 4B, 5, 6;
- 74.11 (139) *Trout Lake, Little, 16-0170-00, [11/5/84P] (T.63, R.1): 1B, 2A, 3B
74.12 3, 4A, 4B, 5, 6;
- 74.13 (140) Turnip Lake, 16-0132-00, (T.64, R.1E, S.24): 1B, 2A, 3B 3, 4A, 4B,
74.14 5, 6;
- 74.15 (141) Twin Lake, lower, ~~69-0967-00~~ 69-0967-02, (T.50, R.14W, S.28, 33):
74.16 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 74.17 (142) Twin Lake, upper, 69-0967-01, (T.50, R.14W, S.28, 33): 1B, 2A, 3B
74.18 3, 4A, 4B, 5, 6;
- 74.19 (143) *Twin Lake, upper (Bear Lake), 38-0408-00, [3/7/88R] (T.56, R.8,
74.20 S.25): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 74.21 (144) unnamed lake, 16-0903-00, (T.63, R.3E, S.20, 21, 28, 29): 1B, 2A, 3B
74.22 3, 4A, 4B, 5, 6;
- 74.23 (145) unnamed lake, 16-0908-00, (T.63, R.1W, S.31): 1B, 2A, 3B 3, 4A, 4B,
74.24 5, 6;

- 75.1 (146) *unnamed lake, 16-0237-00, [11/5/84P] (T.63, R.1, S.19, 30; T.63,
75.2 R.2, S.24, 25): 1B, 2Bd, 3B 3, 4A, 4B, 5, 6;

75.3 (147) *Vale Lake, 16-0061-00, [11/5/84P] (T.64, R.2E, S.3): 1B, 2A, 3B 3,
75.4 4A, 4B, 5, 6;

75.5 (148) Vaseux Lake (East Lily), see Lily Lakes;

75.6 (149) *Vista Lake, 16-0224-00, [11/5/84P] (T.64, R.1): 1B, 2A, 3B 3, 4A,
75.7 4B, 5, 6;

75.8 (150) *Wanihigan Lake (Trap Lake), 16-0349-00, [11/5/84P] (T.63, 64, R.2,
75.9 3): 1B, 2A, 3B 3, 4A, 4B, 5, 6;

75.10 (151) *Wee Lake, 16-0183-00, [11/5/84P] (T.62, R.4W, S.13): 1B, 2A, 3B,
75.11 3, 4A, 4B, 5, 6;

75.12 (152) *Wench Lake, 16-0398-00, [11/5/84P] (T.63, R.3W, S.7, 18): 1B, 2A,
75.13 3B 3, 4A, 4B, 5, 6;

75.14 (153) White Pine Lake, 16-0369-00, [WR] (T.61, R.3W, S.19, 20, 29, 30):
75.15 2B, 3B 3, 4A, 4B, 5, 6; and

75.16 (154) *Winchell Lake, 16-0354-00, [11/5/84P] (T.64, R.2, 3): 1B, 2A, 3B 3,
75.17 4A, 4B, 5, 6.

75.18 C. Calcareous fens: none currently listed.

75.19 D. Scientific and natural areas: *Black Lake Bog [3/7/88P] waters within the
75.20 Black Lake Bog Scientific and Natural Area, Pine County, (T.45, R.15, S.18, 19, 30; T.45,
75.21 R.16, S.13, 24, 25): 2B, 3B, except wetlands, which are 2D, 3, 4A, 4B, 5, 6.

75.22 Subp. 2. **Lake of the Woods basin.** The water-use classifications for the stream
75.23 reaches within each of the major watersheds in the Lake of the Woods basin listed in item
75.24 A are found in tables entitled "Beneficial Use Designations for Stream Reaches" published

76.1 on the website of the Minnesota Pollution Control Agency at
76.2 www.pca.state.mn.us/regulations/minnesota-rulemaking
76.3 www.pca.state.mn.us/regulations/incorporations-reference. The tables are incorporated by
76.4 reference and are not subject to frequent change. The date after each watershed listed in
76.5 item A is the publication date of the applicable table. The water-use classifications for the
76.6 other listed waters in the Lake of the Woods basin are as identified in items B to D. See
76.7 parts 7050.0425 and 7050.0430 part 7050.0415 for the classifications of waters not listed.
76.8 Designated use information for water bodies can also be accessed through the agency's
76.9 Environmental Data Access (<http://www.pca.state.mn.us/quick-links/eda-surface-water-data>).

76.10 [For text of item A, see Minnesota Rules]

76.11 B. Lakes:

- 76.12 (1) *Adams Lake, 38-0153-00, [11/5/84P] (T.64, R.6): 1B, 2A, 3B 3, 4A,

76.13 4B, 5, 6;

76.14 (2) *Agamok Lake, 38-0011-00, [11/5/84P] (T.65, R.5, 6): 1B, 2A, 3B 3,

76.15 4A, 4B, 5, 6;

76.16 (3) *Ahmakose Lake, 38-0365-00 [11/5/84P] (T.64, R.7): 1B, 2A, 3B 3, 4A,

76.17 4B, 5, 6;

76.18 (4) *Ahsub Lake, 38-0516-00, [11/5/84P] (T.64, R.8W, S.27, 28): 1B, 2A,

76.19 3B 3, 4A, 4B, 5, 6;

76.20 (5) *Alpine Lake, 16-0759-00, [11/5/84P] (T.65, R.5): 1B, 2A, 3B 3, 4A,

76.21 4B, 5, 6;

76.22 (6) *Alruss Lake, 69-0005-00, [11/5/84P] (T.64, R.11W, S.7; T.64, R.12W,

76.23 S.12): 1B, 2A, 3B 3, 4A, 4B, 5, 6;

- 77.1 (7) *Amoeber Lake, 38-0227-00, [11/5/84P] (T.65, R.6, 7): 1B, 2A, 3B 3,
77.2 4A, 4B, 5, 6;
- 77.3 (8) *Arkose Lake, 38-0382-00, [11/5/84P] (T.64, 65, R.7): 1B, 2A, 3B 3,
77.4 4A, 4B, 5, 6;
- 77.5 (9) *Ashdick Lake (Caribou Lake), 38-0210-00, [11/5/84P] (T.66, R.6): 1B,
77.6 2A, 3B 3, 4A, 4B, 5, 6;
- 77.7 (10) *Basswood Lake, 38-0645-00, [11/5/84P] (T.64, 65, R.9, 10): 1B, 2A,
77.8 3B 3, 4A, 4B, 5, 6;
- 77.9 (11) *Bat Lake, 16-0752-00, [11/5/84P] (T.64, 65, R.5): 1B, 2A, 3B 3, 4A,
77.10 4B, 5, 6;
- 77.11 (12) *Beartrack Lake, 69-0480-00, [11/5/84P] (T.67, R.15): 1B, 2A, 3B 3,
77.12 4A, 4B, 5, 6;
- 77.13 (13) *Beaver Lake (Elbow Lake), 38-0223-00, [11/5/84P] (T.63, 64, R.6, 7):
77.14 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 77.15 (14) Beaver Hut Lake, 38-0737-00, (T.61, R.10W, S.30, 31; T.61, R.11, S.25,
77.16 36): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 77.17 (15) Beetle Lake, 38-0551-00, (T.60, R.9W, S.7): 1B, 2A, 3B 3, 4A, 4B, 5,
77.18 6;
- 77.19 (16) Big Lake, 69-0190-00, (T.64, 65, R.13): 1C, 2Bd, 3C 3, 4A, 4B, 5, 6;
- 77.20 (17) *Bingshick Lake, 16-0627-00, [11/5/84P] (T.65, R.4, 5): 1B, 2A, 3B 3,
77.21 4A, 4B, 5, 6;
- 77.22 (18) *Brandt Lake (Brant Lake), 16-0600-00, [11/5/84P] (T.65, R.4): 1B,
77.23 2A, 3B 3, 4A, 4B, 5, 6;

- 78.1 (19) *Burntside Lake, 69-0118-00, [3/7/88R] (T.63, 64, R.12, 13, 14): 1B,
78.2 2A, 3B 3, 4A, 4B, 5, 6;
- 78.3 (20) Camp Four (Wessman) Lake, 69-0788-00, (T.59, R.19W, S.4): 1B, 2A,
78.4 3B 3, 4A, 4B, 5, 6;
- 78.5 (21) *Camp Lake, 38-0789-00, [11/5/84P] (T.64, R.11): 1B, 2Bd, 3B 3, 4A,
78.6 4B, 5, 6;
- 78.7 (22) *Caribou Lake, 31-0620-00, [3/7/88R] (T.58, R.26): 1B, 2A, 3B 3, 4A,
78.8 4B, 5, 6;
- 78.9 (23) *Cash Lake, 16-0438-00, [11/5/84P] (T.64, R.3): 1B, 2A, 3B 3, 4A, 4B,
78.10 5, 6;
- 78.11 (24) Cedar Lake, 38-0810-00, (T.63, R.11, 12): 1C, 2Bd, 3C 3, 4A, 4B, 5, 6;
- 78.12 (25) Chant Lake, 69-0172-00, (T.63, R.13W, S.10): 1B, 2A, 3B 3, 4A, 4B,
78.13 5, 6;
- 78.14 (26) *Cherokee Lake, 16-0524-00, [11/5/84P] (T.63, 64, R.4): 1B, 2A, 3B
78.15 3, 4A, 4B, 5, 6;
- 78.16 (27) *Cherry Lake, 38-0166-00, [11/5/84P] (T.65, R.6): 1B, 2A, 3B 3, 4A,
78.17 4B, 5, 6;
- 78.18 (28) *Conchu Lake, 38-0720-00, [11/5/84P] (T.63, R.10W, S.21, 22): 1B,
78.19 2A, 3B 3, 4A, 4B, 5, 6;
- 78.20 (29) *Crab Lake (includes West Crab Lake, 69-0297-00), 69-0220-00,
78.21 [11/5/84P] (T.63, R.13, 14): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 78.22 (30) Crab Lake, 16-0357-00, (T.65, R.2, 3): 1B, 2A, 3B 3, 4A, 4B, 5, 6;

- 79.1 (31) Crane Lake, 69-0616-00, (T.67, 68, R.16, 17): 1B, 2A, ~~3A~~3, 4A, 4B,
79.2 5, 6;
- 79.3 (32) *Crooked Lake, 16-0723-00, [11/5/84P] (T.64, R.5): 1B, 2A, ~~3B~~3, 4A,
79.4 4B, 5, 6;
- 79.5 (33) *Crooked Lake, 38-0817-00, [11/5/84P] (T.66, R.11, 12): 1B, 2A, ~~3B~~3, 4A, 4B,
79.6 5, 6;
- 79.7 (34) *Cruiser Lake (Trout Lake), 69-0832-00, [11/5/84P] (T.69, 70, R.19):
79.8 1B, 2A, ~~3B~~3, 4A, 4B, 5, 6;
- 79.9 (35) Cub Lake, 69-1318-00, (T.61, R.14W, S.2): 1B, 2A, ~~3B~~3, 4A, 4B, 5,
79.10 6;
- 79.11 (36) Dan Lake, 38-0853-00, (T.63, R.10W, S.17): 1B, 2A, ~~3B~~3, 4A, 4B, 5,
79.12 6;
- 79.13 (37) Deepwater Lake, 69-0858-00, (T.59, R.20W, S.2): 1B, 2A, ~~3B~~3, 4A,
79.14 4B, 5, 6;
- 79.15 (38) Dry Lake, 69-0064-00, (T.63, R.12W, S.9): 1B, 2A, ~~3B~~3, 4A, 4B, 5, 6;
- 79.16 (39) Dry Lake, Little, 69-1040-00, (T.63, R.12W, S.9): 1B, 2A, ~~3B~~3, 4A,
79.17 4B, 5, 6;
- 79.18 (40) *Eddy Lake, 38-0187-00, [11/5/84P] (T.65, R.6): 1B, 2A, ~~3B~~3, 4A, 4B,
79.19 5, 6;
- 79.20 (41) Eikela Lake, 38-0677-00, (T.60, R.10W, S.22): 1B, 2A, ~~3B~~3, 4A, 4B,
79.21 5, 6;
- 79.22 (42) Ennis Lake, 38-0634-00, (T.64, R.9W, S.33): 1B, 2A, ~~3B~~3, 4A, 4B, 5,
79.23 6;

- 80.1 (43) Erskine Lake, 31-0311-00, (T.61, R.24W, S.2, 3): 1B, 2A, ~~3B~~ 3, 4A,
80.2 4B, 5, 6;
- 80.3 (44) *Ester Lake (Gnig Lake), 38-0207-00, [11/5/84P] (T.65, 66, R.6): 1B,
80.4 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 80.5 (45) *Eugene Lake, 69-0473-00, [11/5/84P] (T.67, R.15): 1B, 2A, ~~3B~~ 3, 4A,
80.6 4B, 5, 6;
- 80.7 (46) *Explorer Lake (South Three Lake), 38-0399-00, [11/5/84P] (T.64, R.7,
80.8 8): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 80.9 (47) Extortion Lake, 16-0450-00, (T.65, R.3W, S.31, 32): 1B, 2A, ~~3B~~ 3, 4A,
80.10 4B, 5, 6;
- 80.11 (48) Fall Lake, 38-0811-00, (T.63, 64, R.11, 12): 1B, 2Bd, ~~3C~~ 3, 4A, 4B, 5,
80.12 6;
- 80.13 (49) Farm Lake, 38-0779-00, (T.62, 63, R.11): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 80.14 (50) *Fat Lake, 69-0481-00, [11/5/84P] (T.67, R.15): 1B, 2A, ~~3B~~ 3, 4A, 4B,
80.15 5, 6;
- 80.16 (51) *Fay Lake, 16-0783-00, [11/5/84P] (T.65, R.5): 1B, 2A, ~~3B~~ 3, 4A, 4B,
80.17 5, 6;
- 80.18 (52) Fenske Lake, 69-0085-00, (T.64, R.12, S.29, 30, 32): 1C, 2Bd, ~~3C~~ 3,
80.19 4A, 4B, 5, 6;
- 80.20 (53) *Fern Lake, 16-0716-00, [11/5/84P] (T.64, R.5): 1B, 2A, ~~3B~~ 3, 4A, 4B,
80.21 5, 6;
- 80.22 (54) *Fern Lake, West, 16-0718-00, [11/5/84P] (T.64, R.5): 1B, 2A, ~~3B~~ 3,
80.23 4A, 4B, 5, 6;

- 81.1 (55) *Finger Lake, 69-0348-00, [11/5/84P] (T.67, R.14): 1B, 2A, 3B 3, 4A,
81.2 4B, 5, 6;
- 81.3 (56) *Fishdance Lake, 38-0343-00, [11/5/84P] (T.63, R.7): 1B, 2A, 3B 3,
81.4 4A, 4B, 5, 6;
- 81.5 (57) *Found Lake, 38-0620-00, [11/5/84P] (T.64, R.9W, S.10, 15): 1B, 2A,
81.6 3B 3, 4A, 4B, 5, 6;
- 81.7 (58) *Fraser Lake, 38-0372-00, [11/5/84P] (T.64, R.7): 1B, 2A, 3B 3, 4A,
81.8 4B, 5, 6;
- 81.9 (59) *French Lake, 16-0755-00, [11/5/84P] (T.64, 65, R.5): 1B, 2A, 3B 3,
81.10 4A, 4B, 5, 6;
- 81.11 (60) *Frost Lake, 16-0571-00, [11/5/84P] (T.64, R.4): 1B, 2A, 3B 3, 4A, 4B,
81.12 5, 6;
- 81.13 (61) *Gabimichigami Lake, 16-0811-00, [11/5/84P] (T.64, 65, R.5, 6): 1B,
81.14 2A, 3B 3, 4A, 4B, 5, 6;
- 81.15 (62) *Ge-Be-On-Equat Lake, 69-0350-00, [11/5/84P] (T.67, R.14): 1B, 2A,
81.16 3B 3, 4A, 4B, 5, 6;
- 81.17 (63) *Gijikiki Lake (Cedar Lake), 38-0209-00, [11/5/84P] (T.65, 66, R.6):
81.18 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 81.19 (64) *Gillis Lake, 16-0753-00, [11/5/84P] (T.64, 65, R.5): 1B, 2A, 3B 3, 4A,
81.20 4B, 5, 6;
- 81.21 (65) Glacier Pond No. 1, 38-0712-00, (T.63, R. 10W, S.11): 1B, 2A, 3B 3,
81.22 4A, 4B, 5, 6;
- 81.23 (66) Glacier Pond No. 2, 38-0712-02, (T.63, R.10W, S.11): 1B, 2A, 3B 3,
81.24 4A, 4B, 5, 6;

- 82.1 (67) *Gordon Lake, 16-0569-00, [11/5/84P] (T.64, R.4): 1B, 2A, ~~3B~~ 3, 4A,
82.2 4B, 5, 6;
- 82.3 (68) Gull Lake, 16-0632-00, (T.66, R.4, 5): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 82.4 (69) *Gun Lake, 69-0487-00, [11/5/84P] (T.67, 68, R.15): 1B, 2A, ~~3B~~ 3, 4A,
82.5 4B, 5, 6;
- 82.6 (70) *Gunflint Lake, 16-0356-00, [3/7/88R] (T.65, R.2, 3, 4): 1B, 2A, ~~3B~~ 3,
82.7 4A, 4B, 5, 6;
- 82.8 (71) Gunflint Lake, Little, 16-0330-00, (T.65, R.2): 1B, 2Bd, ~~3C~~ 3, 4A, 4B,
82.9 5, 6;
- 82.10 (72) Gypsy Lake, 38-0665-00, (T.60, R.10W, S.6, 7): 1B, 2A, ~~3B~~ 3, 4A, 4B,
82.11 5, 6;
- 82.12 (73) Hanson Lake, 69-0189-00, (T.64, R.13W, S.36): 1B, 2A, ~~3B~~ 3, 4A, 4B,
82.13 5, 6;
- 82.14 (74) *Hanson Lake, 38-0206-00, [11/5/84P] (T.65, 66, R.6): 1B, 2A, ~~3B~~ 3,
82.15 4A, 4B, 5, 6;
- 82.16 (75) High Lake, 69-0071-00, (T.63, R.12W, S.3, 4, 5; T.64, R.12W, S.33,
82.17 34): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 82.18 (76) Hogback (Twin or Canal) Lake, 38-0057-01 and 38-0057-02, (T.60,
82.19 R.6W, S.31): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 82.20 (77) *Holt Lake, 38-0178-00, [11/5/84P] (T.65, R.6): 1B, 2A, ~~3B~~ 3, 4A, 4B,
82.21 5, 6;
- 82.22 (78) *Howard Lake, 16-0789-00, [11/5/84P] (T.65, R.5): 1B, 2A, ~~3B~~ 3, 4A,
82.23 4B, 5, 6;

- 83.1 (79) *Hustler Lake, 69-0343-00, [11/5/84P] (T.66, 67, R.14): 1B, 2A, 3B 3,
83.2 4A, 4B, 5, 6;
- 83.3 (80) *Ima Lake (Slate Lake), 38-0400-00, [11/5/84P] (T.64, R.7, 8): 1B, 2A,
83.4 3B 3, 4A, 4B, 5, 6;
- 83.5 (81) Indian Lake, 38-0440-00, (T.60, R.8W, S.35): 1B, 2A, 3B 3, 4A, 4B, 5,
83.6 6;
- 83.7 (82) *Jacob (Louis) Lake, 69-0077-00, [11/5/84P] (T.64, R.12W, S.11, 12):
83.8 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 83.9 (83) James (Jammer) Lake, 69-0734-00, (T.60, R.18W, S.27): 1B, 2A, 3B
83.10 3, 4A, 4B, 5, 6;
- 83.11 (84) Jasper Lake, 38-0641-00, (T.63, 64, R.9, 10): 1C, 2Bd, 3C 3, 4A, 4B,
83.12 5, 6;
- 83.13 (85) *Jasper Lake, 16-0768-00, [11/5/84P] (T.65, R.5): 1B, 2A, 3B 3, 4A,
83.14 4B, 5, 6;
- 83.15 (86) *Johnson Lake, 69-0691-00, [3/7/88R] (T.67, 68, R.17, 18): 1B, 2A, 3B
83.16 3, 4A, 4B, 5, 6;
- 83.17 (87) Jouppi Lake, 38-0909-00, (T.59, R.8W, S.14, 22, 23): 1B, 2A, 3B 3,
83.18 4A, 4B, 5, 6;
- 83.19 (88) Judd Lake, 38-0615-00, (T.63, R.9W, S.4, 5; T.64, R.9W, S.32, 33): 1B,
83.20 2A, 3B 3, 4A, 4B, 5, 6;
- 83.21 (89) *Kabetogama Lake, 69-0845-00, [11/5/84P] (T.69, 70, R.19, 20, 21,
83.22 22): 1B, 2Bd, 3A 3, 4A, 4B, 5, 6;
- 83.23 (90) *Karl Lake, 16-0461-00, [11/5/84P] (T.64, R.3, 4): 1B, 2A, 3B 3, 4A,
83.24 4B, 5, 6;

- 84.1 (91) *Kek Lake, Little, 38-0228-00, [11/5/84P] (T.65, R.6, 7): 1B, 2A, ~~3B~~
84.2 3, 4A, 4B, 5, 6;
- 84.3 (92) *Kekekabic Lake, 38-0226-00, [11/5/84P] (T.64, 65, R.6, 7): 1B, 2A,
84.4 ~~3B~~ 3, 4A, 4B, 5, 6;
- 84.5 (93) *Knife Lake, 38-0404-00, [11/5/84P] (T.65, R.6, 7, 8): 1B, 2A, ~~3B~~ 3,
84.6 4A, 4B, 5, 6;
- 84.7 (94) *Lake of the Clouds Lake (Dutton Lake), 38-0169-00, [11/5/84P] (T.65,
84.8 R.6): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 84.9 (95) Lake of the Woods, 39-0002-00, (T.161, 162, 163, 164, 165, 166, 167,
84.10 168, R.30, 31, 32, 33, 34, 35, 36): 1B, 2Bd, ~~3A~~ 3, 4A, 4B, 5, 6;
- 84.11 (96) Lake Vermilion, 69-0378-00, (T.61, 62, 63, R.14, 15, 16, 17, 18): 1C,
84.12 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 84.13 (97) *Larson Lake, 31-0317-00, [3/7/88R] (T.61, R.24W, S.16, 21): 1B, 2A,
84.14 ~~3B~~ 3, 4A, 4B, 5, 6;
- 84.15 (98) Little Long Lake, 69-0066-00, (T.63, R.12): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5,
84.16 6;
- 84.17 (99) *Long Island Lake, 16-0460-00, [11/5/84P] (T.64, R.3, 4): 1B, 2A, ~~3B~~
84.18 3, 4A, 4B, 5, 6;
- 84.19 (100) *Loon Lake, 16-0448-00, [3/7/88R] (T.65, R.3): 1B, 2A, ~~3B~~ 3, 4A,
84.20 4B, 5, 6;
- 84.21 (101) *Loon Lake, 69-0470-00, [11/5/84P] (T.66, 67, R.15): 1B, 2A, ~~3B~~ 3,
84.22 4A, 4B, 5, 6;
- 84.23 (102) *Lunar Lake (Moon Lake), 38-0168-00, [11/5/84P] (T.65, R.6): 1B,
84.24 2A, ~~3B~~ 3, 4A, 4B, 5, 6;

- 85.1 (103) *Lynx Lake, 69-0383-00, [11/5/84P] (T.66, R.14, 15): 1B, 2A, 3B 3,
85.2 4A, 4B, 5, 6;
- 85.3 (104) *Magnetic Lake, 16-0463-00, [3/7/88R] (T.65, R.3, 4): 1B, 2A, 3B 3,
85.4 4A, 4B, 5, 6;
- 85.5 (105) *Makwa Lake (Bear Lake), 38-0147-00, [11/5/84P] (T.64, R.6): 1B,
85.6 2A, 3B 3, 4A, 4B, 5, 6;
- 85.7 (106) *Marble Lake, 38-0109-00, [11/5/84P] (T.64, R.6): 1B, 2A, 3B 3, 4A,
85.8 4B, 5, 6;
- 85.9 (107) *Mavis Lake, 16-0528-00, [11/5/84P] (T.64, R.4W, S.4): 1B, 2A, 3B
85.10 3, 4A, 4B, 5, 6;
- 85.11 (108) *Mayhew Lake, 16-0337-00, [3/7/88R] (T.65, R.2): 1B, 2A, 3B 3, 4A,
85.12 4B, 5, 6;
- 85.13 (109) *Meditation Lake, 16-0583-00, [11/5/84P] (T.65, R.4W, S.7, 8): 1B,
85.14 2A, 3B 3, 4A, 4B, 5, 6;
- 85.15 (110) *Mesaba Lake, 16-0673-00, [11/5/84P] (T.63, R.5): 1B, 2A, 3B 3, 4A,
85.16 4B, 5, 6;
- 85.17 (111) Miner's Mine Pit, 69-1293-00, (T.63, R.12W, S.26, 27, 28): 1B, 2A,
85.18 3B 3, 4A, 4B, 5, 6;
- 85.19 (112) *Missing Link Lake, 16-0529-00, [11/5/84P] (T.64, R.4W, S.4): 1B,
85.20 2A, 3B 3, 4A, 4B, 5, 6;
- 85.21 (113) *Missionary Lake (East Three Lake), 38-0398-00, [11/5/84P] (T.64,
85.22 R.7, 8): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 85.23 (114) *Moose Lake, 38-0644-00, [11/5/84P] (T.64, R.9, 10): 1B, 2Bd, 3B 3,
85.24 4A, 4B, 5, 6;

- 86.1 (115) *Mora Lake, 16-0732-00, [11/5/84P] (T.64, R.5): 1B, 2A, ~~3B~~ 3, 4A,
86.2 4B, 5, 6;
- 86.3 (116) *Mukooda Lake, 69-0684-00, [11/5/84P] (T.68, R.17): 1B, 2A, ~~3B~~ 3,
86.4 4A, 4B, 5, 6;
- 86.5 (117) *Namakan Lake, 69-0693-00, [11/5/84P] (T.69, 70, R.17, 18, 19): 1B,
86.6 2Bd, ~~3A~~ 3, 4A, 4B, 5, 6;
- 86.7 (118) *Neglige Lake, 38-0492-00, [11/5/84P] (T.64, R.8W, S.1, 2, 11, 12):
86.8 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 86.9 (119) Nickel (Nichols) Lake, 31-0470-00, (T.59, R.25W, S.12): 1B, 2A, ~~3B~~
86.10 3, 4A, 4B, 5, 6;
- 86.11 (120) Norberg Lake, 69-1312-00, (T.61, R.14W, S.1): 1B, 2A, ~~3B~~ 3, 4A, 4B,
86.12 5, 6;
- 86.13 (121) *North Lake, 16-0331-00, [3/7/88R] (T.65, R.2): 1B, 2A, ~~3B~~ 3, 4A,
86.14 4B, 5, 6;
- 86.15 (122) North Lake, Little, 16-0329-00, (T.65, R.2): 1B, 2Bd, ~~3C~~ 3, 4A, 4B,
86.16 5, 6;
- 86.17 (123) Norway Lake, 38-0688-00, (T.61, R.10W, S.3): 1B, 2A, ~~3B~~ 3, 4A, 4B,
86.18 5, 6;
- 86.19 (124) *Ogishkemuncie Lake, 38-0180-00, [11/5/84P] (T.65, R.6): 1B, 2A,
86.20 3B 3, 4A, 4B, 5, 6;
- 86.21 (125) *Ojibway Lake (upper Twin), 38-0640-00, [3/7/88R] (T.63, R.9, 10):
86.22 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 86.23 (126) *Owl Lake, 16-0726-00, [11/5/84P] (T.64, R.5): 1B, 2A, ~~3B~~ 3, 4A,
86.24 4B, 5, 6;

- 87.1 (127) *Oyster Lake, 69-0330-00, [11/5/84P] (T.66, R.14): 1B, 2A, 3B 3, 4A,
87.2 4B, 5, 6;
- 87.3 (128) *Paulson Lake, 16-0626-00, [11/5/84P] (T.65, R.4W, S.19; T.65, R.5W,
87.4 S.24): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 87.5 (129) Peanut Lake, 38-0662-00, (T.60, R.10W, S.5): 1B, 2A, 3B 3, 4A, 4B,
87.6 5, 6;
- 87.7 (130) Pelican Lake, 69-0841-00, (T.64, 65, R.19, 20, 21): 1C, 2Bd, 3E 3,
87.8 4A, 4B, 5, 6;
- 87.9 (131) *Pellet Lake, 16-0592-00, [11/5/84P] (T.65, R.4, S.19, 20): 1B, 2Bd,
87.10 3B 3, 4A, 4B, 5, 6;
- 87.11 (132) *Peter Lake, 16-0757-00, [11/5/84P] (T.64, 65, R.5): 1B, 2A, 3B 3,
87.12 4A, 4B, 5, 6;
- 87.13 (133) Pickerel Lake, 69-0934-00, (T.60, R.21W, S.17): 1B, 2A, 3B 3, 4A,
87.14 4B, 5, 6;
- 87.15 (134) Portage Lake, 16-0327-00, (T.64, R. 2W, S.3, 4, 5; T.65, R.2W, S.33):
87.16 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 87.17 (135) *Portage Lake, 38-0524-00, [11/5/84P] (T.65, R.8): 1B, 2A, 3B 3, 4A,
87.18 4B, 5, 6;
- 87.19 (136) Portage Lake, Little, 16-0297-00, (T.64, R.2W, S.3): 1B, 2A, 3B 3,
87.20 4A, 4B, 5, 6;
- 87.21 (137) *Powell Lake, 16-0756-00, [11/5/84P] (T.64, 65, R.5): 1B, 2A, 3B 3,
87.22 4A, 4B, 5, 6;
- 87.23 (138) *Rabbit Lake, 38-0214-00, [11/5/84P] (T.66, R.6): 1B, 2A, 3B 3, 4A,
87.24 4B, 5, 6;

- 88.1 (139) *Rainy Lake, 69-0694-00, [11/5/84P] (T.70, 71, R.18, 19, 20, 21, 22,
88.2 23): 1B, 2Bd, 3A 3, 4A, 4B, 5, 6;
- 88.3 (140) *Raven Lake (Lynx Lake), 38-0113-00, [11/5/84P] (T.64, R.6): 1B,
88.4 2A, 3B 3, 4A, 4B, 5, 6;
- 88.5 (141) *Red Rock Lake, 16-0793-00, [11/5/84P] (T.65, 66, R.5): 1B, 2A, 3B
88.6 3, 4A, 4B, 5, 6;
- 88.7 (142) Regenbogen Lake, 69-0081-00, (T.64, R.12W, S.18): 1B, 2A, 3B 3,
88.8 4A, 4B, 5, 6;
- 88.9 (143) *Rog Lake, 16-0765-00, [11/5/84P] (T.65, R.5W, S.16, 17): 1B, 2A,
88.10 3B 3, 4A, 4B, 5, 6;
- 88.11 (144) *Ruby Lake, Big, 16-0333-00, [11/5/84P] (T.66, R.14): 1B, 2A, 3B 3,
88.12 4A, 4B, 5, 6;
- 88.13 (145) *Saganaga Lake, 16-0633-00, [11/5/84P] (T.66, 67, R.4, 5): 1B, 2A,
88.14 3B 3, 4A, 4B, 5, 6;
- 88.15 (146) *Saganaga Lake, Little, 16-0890-00, [11/5/84P] (T.64, R.5, 6): 1B, 2A,
88.16 3B 3, 4A, 4B, 5, 6;
- 88.17 (147) *Sand Point Lake, 69-0617-00, [11/5/84P] (T.67, 68, 69, R.16, 17):
88.18 1B, 2A, 3A 3, 4A, 4B, 5, 6;
- 88.19 (148) Scarp (Cliff) Lake, 38-0058-00, (T.60, R.6W, S.31, 32): 1B, 2A, 3B
88.20 3, 4A, 4B, 5, 6;
- 88.21 (149) *Sea Gull Lake, 16-0629-00, [11/5/84P] (T.65, 66, R.4, 5): 1B, 2A,
88.22 3B 3, 4A, 4B, 5, 6;
- 88.23 (150) *Sema Lake (Coon Lake), 38-0386-00, [11/5/84P] (T.65, R.7): 1B,
88.24 2A, 3B 3, 4A, 4B, 5, 6;

- 89.1 (151) Shoo-fly Lake, 38-0422-00, (T.59, R.8W, S.1; T.60, R.8W, S.36): 1B,
89.2 2A, 3B 3, 4A, 4B, 5, 6;
- 89.3 (152) *Skull Lake, 38-0624-00, [11/5/84P] (T.64, R.9W, S.14): 1B, 2A, 3B
89.4 3, 4A, 4B, 5, 6;
- 89.5 (153) *Snowbank Lake, 38-0529-00, [11/5/84P] (T.63, 64, R.8, 9): 1B, 2A,
89.6 3B 3, 4A, 4B, 5, 6;
- 89.7 (154) *Spoon Lake (Fames Lake), 38-0388-00, [11/5/84P] (T.65, R.7): 1B,
89.8 2A, 3B 3, 4A, 4B, 5, 6;
- 89.9 (155) *Spring Lake, 69-0761-00, [3/7/88R] (T.68, R.18): 1B, 2A, 3B 3, 4A,
89.10 4B, 5, 6;
- 89.11 (156) Steamhaul Lake, 38-0570-00, (T.60, R.9W, S.23): 1B, 2A, 3B 3, 4A,
89.12 4B, 5, 6;
- 89.13 (157) *Strup Lake, 38-0360-00, [11/5/84P] (T.64, R.7): 1B, 2A, 3B 3, 4A,
89.14 4B, 5, 6;
- 89.15 (158) *Sumpet Lake, 38-0283-00, [11/5/84P] (T.61, R.7): 1B, 2Bd, 3B 3,
89.16 4A, 4B, 5, 6;
- 89.17 (159) Surber Lake, 16-0343-00, (T.65, R.2W, S.34): 1B, 2A, 3B 3, 4A, 4B,
89.18 5, 6;
- 89.19 (160) *Takucmich Lake, 69-0369-00, [11/5/84P] (T.67, 68, R.14): 1B, 2A,
89.20 3B 3, 4A, 4B, 5, 6;
- 89.21 (161) *Tarry Lake, 16-0731-00, [11/5/84P] (T.64, R.5): 1B, 2A, 3B 3, 4A,
89.22 4B, 5, 6;
- 89.23 (162) *Thomas Lake, 38-0351-00, [11/5/84P] (T.63, 64, R.7): 1B, 2A, 3B
89.24 3, 4A, 4B, 5, 6;

- 90.1 (163) *Thumb Lake, 69-0352-00, [11/5/84P] (T.67, R.14): 1B, 2A, 3B 3,
90.2 4A, 4B, 5, 6;
- 90.3 (164) Tofte Lake, 38-0724-00, (T.63, R.10W, S.2, 3, 10, 11; T.64, R.10W,
90.4 S.35): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 90.5 (165) *Topaz Lake (Star Lake), 38-0172-00, [11/5/84P] (T.65, R.6): 1B, 2A,
90.6 3B 3, 4A, 4B, 5, 6;
- 90.7 (166) *Town Lake, 16-0458-00, [11/5/84P] (T.63, 64, R.3, 4): 1B, 2A, 3B
90.8 3, 4A, 4B, 5, 6;
- 90.9 (167) Trappers Lake, 38-0431-00, (T.60, R.8W, S.27, 34): 1B, 2A, 3B 3, 4A,
90.10 4B, 5, 6;
- 90.11 (168) Trip Lake, 16-0451-00, (T.65, R.3W, S.32): 1B, 2A, 3B 3, 4A, 4B, 5,
90.12 6;
- 90.13 (169) *Trout Lake, Big, 69-0498-00, [11/5/84P] (T.63, 64, R.15, 16): 1B,
90.14 2A, 3B 3, 4A, 4B, 5, 6;
- 90.15 (170) *Trout Lake, Little (Pocket Lake), 69-0682-00, [11/5/84P] (T.68, R.17):
90.16 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 90.17 (171) *Trygg (Twigg) Lake, 69-0389-00, [11/5/84P] (T.68, R.14W, S.31;
90.18 T.68, R.15W, S.36): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 90.19 (172) *Tucker Lake (Trucker Lake), 16-0417-00, [11/5/84P] (T.64, R.3): 1B,
90.20 2Bd, 3B 3, 4A, 4B, 5, 6;
- 90.21 (173) *Tuscarora Lake, 16-0623-00, [11/5/84P] (T.64, R.4, 5): 1B, 2A, 3B
90.22 3, 4A, 4B, 5, 6;
- 90.23 (174) unnamed (Pear) lake, 38-0769-00, (T.60, R.11W, S.4): 1B, 2A, 3B 3,
90.24 4A, 4B, 5, 6;

- 91.1 (175) *unnamed lake, 16-0598-00, [11/5/84P] (T.65, R.4, S.29, 30): 1B, 2Bd

91.2 3B 3, 4A, 4B, 5, 6;

91.3 (176) unnamed swamp, Winton, (T.63, R.11, S.19; T.63, R.12, S.24): 3, 4A,

91.4 4B, 5, 6, 7;

91.5 (177) *Vera Lake, 38-0491-00, [11/5/84P] (T.64, R.8): 1B, 2A, 3B 3, 4A,

91.6 4B, 5, 6;

91.7 (178) Vermilion, Lake, 69-0378-00, (see Lake Vermilion);

91.8 (179) *Virgin Lake, 16-0719-00, [11/5/84P] (T.64, R.5): 1B, 2A, 3B 3, 4A,

91.9 4B, 5, 6;

91.10 (180) West Crab Lake, 69-0220-00, (see Crab Lake);

91.11 (181) White Iron Lake, 69-0004-00, (T.62, 63, R.11, 12): 1C, 2Bd, 3C 3, 4A,

91.12 4B, 5, 6;

91.13 (182) *Wine Lake, 16-0686-00, [11/5/84P] (T.63, R.5): 1B, 2A, 3B 3, 4A,

91.14 4B, 5, 6;

91.15 (183) *Wisini Lake, 38-0361-00, [11/5/84P] (T.64, R.7): 1B, 2A, 3B 3, 4A,

91.16 4B, 5, 6; and

91.17 (184) Woods, Lake of the, 39-0002-00, (see Lake of the Woods).

91.18 C. Calcareous fens: none currently listed.

91.19 D. Scientific and natural areas: *Purvis Lake-Ober, [11/5/84P] waters within the

91.20 Purvis Lake-Ober Foundation Scientific and Natural Area, Saint Louis County, (T.62, R.13):

91.21 2B, 3B 3, 4A, 4B, 5, 6, except wetlands, which are 2D, 3, 4A, 4B, 5, 6.

91.22 Subp. 3. **Red River of the North basin.** The water-use classifications for the stream

91.23 reaches within each of the major watersheds in the Red River of the North basin listed in

item A are found in tables entitled "Beneficial Use Designations for Stream Reaches" published on the website of the Minnesota Pollution Control Agency at www.pca.state.mn.us/regulations/minnesota-rulemaking.
www.pca.state.mn.us/regulations/incorporations-reference The tables are incorporated by reference and are not subject to frequent change. The date after each watershed listed in item A is the publication date of the applicable table. The water-use classifications for the other listed waters in the Red River of the North basin are as identified in items B to D. See parts 7050.0425 and 7050.0430 part 7050.0415 for the classifications of waters not listed. Designated use information for water bodies can also be accessed through the agency's Environmental Data Access (<http://www.pca.state.mn.us/quick-links/eda-surface-water-data>).

[For text of item A, see Minnesota Rules]

B. Lakes:

- (1) Bass Lake, 56-0722-00, (T.135, R.42W, S.10, 11): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- (2) Hanson Lake, 03-0177-00, (T.139, R.39W, S.6): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- (3) Hoot Lake, 56-0782-00, (T.133, R.42, 43): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- (4) Lake Bronson, 35-0003-00, (T.160, 161, R.46): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- (5) Twin Lake, East, 03-0362-00, (T.138, R.41): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- (6) unnamed slough, Vergas, (T.137, R.40, S.18; T.137, R.41, S.13, 24): 3, 4A, 4B, 5, 6, 7;
- (7) Wapatus (Island) Lake, 15-0127-00, (T.144, R.38W, S.21, 28): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6; and

(8) Wright Lake, 56-0783-00, (T.133, R.42, 43): 1C, 2Bd, 3C 3, 4A, 4B, 5,

6.

[For text of item C, see Minnesota Rules]

D. Scientific and natural areas:

93.5 (1) *Green Water Lake, [11/5/84P] waters within the Green Water Lake

93.6 Scientific and Natural Area, Becker County, (T.141, R.38, S.28, 33, 34): 2B, 3B 3, 4A, 4B

93.7 5, 6, except wetlands, which are 2D, 3, 4A, 4B, 5, 6; and

Subp. 4. Upper Mississippi River basin (headwaters to the confluence with the St. Croix River). The water-use classifications for the stream reaches within each of the major watersheds in the upper Mississippi River basin from the headwaters to the confluence with the St. Croix River listed in item A are found in tables entitled "Beneficial Use Designations for Stream Reaches" published on the website of the Minnesota Pollution Control Agency at www.pca.state.mn.us/regulations/minnesota-rulemaking www.pca.state.mn.us/regulations/incorporations-reference. The tables are incorporated by reference and are not subject to frequent change. The date after each watershed listed in item A is the publication date of the applicable table. The water-use classifications for the other listed waters in the upper Mississippi River basin from the headwaters to the confluence with the St. Croix River are as identified in items B to D. See parts 7050.0425 and 7050.0430 part 7050.0415 for the classifications of waters not listed. Designated use information for water bodies can also be accessed through the agency's Environmental Data Access (<http://www.pca.state.mn.us/quick-links/eda-surface-water-data>).

94.1 *[For text of item A, see Minnesota Rules]*

94.2 B. Lakes:

94.3 (1) Allen Lake, 18-0208-00, (T.138, R.26W, S.5): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5,

94.4 6;

94.5 (2) Bald Eagle Lake, 62-0002-00, (T.30, 31, R.21, 22): 1C, 2Bd, ~~3C~~ 3, 4A,

94.6 4B, 5, 6;

94.7 (3) Bee Cee Lake, 31-0443-00, (T.58, R.25W, S.28, 33): 1B, 2A, ~~3B~~ 3, 4A,

94.8 4B, 5, 6;

94.9 (4) Benedict Lake, 29-0048-00, (T.142, R.32): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;

94.10 (5) Benjamin Lake, 04-0033-00, (T.148, R.30W, S.7, 18; T.148, R.31W,

94.11 S.13): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;

94.12 (6) Blacksmith Lake, 29-0275-00, (T.142, R.35W, S.13): 1B, 2A, ~~3B~~ 3, 4A,

94.13 4B, 5, 6;

94.14 (7) *Blue Lake, 01-0181-00, [3/7/88R] (T.46, 47, R.27): 1B, 2A, ~~3B~~ 3, 4A,

94.15 4B, 5, 6;

94.16 (8) *Blue Lake, 29-0184-00, [3/7/88R] (T.141, R.34): 1B, 2A, ~~3B~~ 3, 4A, 4B,

94.17 5, 6;

94.18 (9) *Bluewater Lake, 31-0395-00, [3/7/88R] (T.57, R.25): 1B, 2A, ~~3B~~ 3, 4A,

94.19 4B, 5, 6;

94.20 (10) Cenaiko Lake (unnamed), 02-0654-00, (T.31, R.24W, S.26): 1B, 2A,

94.21 3B 3, 4A, 4B, 5, 6;

94.22 (11) Centerville Lake, 02-0006-00, (T.31, R.22): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5,

94.23 6;

- 95.1 (12) Charley Lake, 62-0062-00, (T.30, R.23): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 95.2 (13) Crappie Lake, 29-0127-00, (T.143, R.33W, S.31): 1B, 2A, ~~3B~~ 3, 4A, 4B,
95.3 5, 6;
- 95.4 (14) Deep Lake, 62-0018-00, (T.30, R.22): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 95.5 (15) Diamond Lake, 11-0396-00, (T.141, R.30W, S.26, 27, 34): 1B, 2A, ~~3B~~
95.6 3, 4A, 4B, 5, 6;
- 95.7 (16) Hazel Lake, 11-0295-00, (T.141, R.29W, S.25): 1B, 2A, ~~3B~~ 3, 4A, 4B,
95.8 5, 6;
- 95.9 (17) Hay Lake, lower, 18-0378-00, (T.137, R.28, 29): 1B, 2A, ~~3B~~ 3, 4A, 4B,
95.10 5, 6;
- 95.11 (18) *Kabekona Lake, 29-0075-00, [3/7/88R] (T.142, 143, R.32, 33): 1B,
95.12 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 95.13 (19) Kennedy Lake, 31-0137-00, (T.58, R.23): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 95.14 (20) Kremer Lake, 31-0645-00, (T.58, R.26W, S.33, 34): 1B, 2A, ~~3B~~ 3, 4A,
95.15 4B, 5, 6;
- 95.16 (21) LaSalle Lake, lower, 29-0309-00, (T.145, R.35): 1B, 2A, ~~3B~~ 3, 4A, 4B,
95.17 5, 6;
- 95.18 (22) Loon (Townline) Lake, 01-0024-00, (T.50, R.22W, S.7; T.50, R.23W,
95.19 S.12, 13): 1B, 2A, ~~3B~~ 3, 4A, 4B, 5, 6;
- 95.20 (23) Lucky Lake, 31-0603-00, (T.57, R.26W, S.14): 1B, 2A, ~~3B~~ 3, 4A, 4B,
95.21 5, 6;
- 95.22 (24) Mallen Mine Pit, 18-0740-00, (T.46, R.29W, S.17): 1B, 2A, ~~3B~~ 3, 4A,
95.23 4B, 5, 6;

- 96.1 (25) Manuel (South Yawkey) Mine Pit, 18-0435-00, (T.46, R.29W, S.1): 1B,
96.2 2A, 3B 3, 4A, 4B, 5, 6;
- 96.3 (26) Margaret Lake, 11-0045-00, (T.139, R.26W, S.16): 1B, 2A, 3B 3, 4A,
96.4 4B, 5, 6;
- 96.5 (27) Marion Lake, 11-0046-00, (T.139, R.26W, S.16, 17): 1B, 2A, 3B 3, 4A,
96.6 4B, 5, 6;
- 96.7 (28) Martin (Huntington, Feigh) Mine Pit, 18-0441-00, (T.46, R.29W, S.9,
96.8 10, 16): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 96.9 (29) Moonshine Lake, Little (Moonshine), 31-0444-00, (T.58, R.25W, S.28,
96.10 33): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 96.11 (30) Newman (Putnam) Lake, 29-0237-00, (T.145, R.34W, S.10, 11): 1B,
96.12 2A, 3B 3, 4A, 4B, 5, 6;
- 96.13 (31) Otter Lake, 02-0003-00, (T.30, 31, R.22): 1C, 2Bd, 3C 3, 4A, 4B, 5, 6;
- 96.14 (32) Pennington (Mahnomen, Alstead, Arco) Mine Pit, 18-0439-00, (T.46,
96.15 R.29W, S.3, 9, 10, 11): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 96.16 (33) Perch Lake, 11-0826-00, (T.139, R.31W, S.33): 1B, 2A, 3B 3, 4A, 4B,
96.17 5, 6;
- 96.18 (34) Pleasant Lake, 62-0046-00, (T.30, R.22, 23): 1C, 2Bd, 3C 3, 4A, 4B, 5,
96.19 6;
- 96.20 (35) Pleasant Lake, 18-0278-00, (T.137, R.27W, S.19): 1B, 2A, 3B 3, 4A,
96.21 4B, 5, 6;
- 96.22 (36) *Pokegama Lake, 31-0532-01 and 31-0532-02, [3/7/88R] (T.54, 55,
96.23 R.25, 26): 1B, 2A, 3B 3, 4A, 4B, 5, 6;

- 97.1 (37) Portsmouth Mine Pit, 18-0437-00, (T.46, R.29W, S.1, 2, 11): 1B, 2A,
97.2 3B 3, 4A, 4B, 5, 6;
- 97.3 (38) *Roosevelt Lake, 11-0043-00, [3/7/88R] (T.138, 139, R.26): 1B, 2A,
97.4 3B 3, 4A, 4B, 5, 6;
- 97.5 (39) Sagamore Mine Pit, 18-0523-00, (T.46, R.29W, S.19; T.46, R.30W,
97.6 S.24): 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 97.7 (40) Section 6 Mine Pit, 18-0667-00, (T.46, R.29W, S.6): 1B, 2A, 3B 3, 4A,
97.8 4B, 5, 6;
- 97.9 (41) Snoshoe Mine Pit, 18-0524-00, (T.46, R.29W, S.17, 18): 1B, 2A, 3B 3,
97.10 4A, 4B, 5, 6;
- 97.11 (42) Snowshoe (Little Andrus) Lake, 11-0054-00, (T.139, R.26W, S.29, 30):
97.12 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 97.13 (43) Strawberry Lake, 18-0363-00, (T.137, R.28W, S.27, 34): 1B, 2A, 3B 3,
97.14 4A, 4B, 5, 6;
- 97.15 (44) Sucker Lake, 62-0028-00, (T.30, R.22): 1C, 2Bd, 3C 3, 4A, 4B, 5, 6;
- 97.16 (45) Taylor Lake, 01-0109-00, (T.52, R.25W, S.16): 1B, 2A, 3B 3, 4A, 4B,
97.17 5, 6;
- 97.18 (46) Teepee Lake, 11-0312-00, (T.141, R.29W, S.30; T.141, R.30W, S.25):
97.19 1B, 2A, 3B 3, 4A, 4B, 5, 6;
- 97.20 (47) Tioga Mine Pit, 31-0946-00, (T.55, R.26W, S.26): 1B, 2A, 3B 3, 4A,
97.21 4B, 5, 6;
- 97.22 (48) Trout Lake, 31-0216-00, (T.55, 56, R.24): 1B, 2A, 3B 3, 4A, 4B, 5, 6;

- 98.1 (49) *Trout Lake, Big, 31-0410-00, [3/7/88R] (T.57, 58, R.25): 1B, 2A, **3B**
98.2 3, 4A, 4B, 5, 6;
- 98.3 (50) *Trout Lake, Big, 18-0315-00, [3/7/88R] (T.137, 138, R.27, 28): 1B,
98.4 2A, **3B** 3, 4A, 4B, 5, 6;
- 98.5 (51) *Trout Lake, Little, 31-0394-00, [3/7/88R] (T.57, R.25): 1B, 2A, **3B** 3,
98.6 4A, 4B, 5, 6;
- 98.7 (52) unnamed swamp, Flensburg, (T.129, R.31, S.25): 3, 4A, 4B, 5, 6, 7;
- 98.8 (53) unnamed slough, Miltona, (T.130, R.37, S.26, 35, 36): 3, 4A, 4B, 5, 6,
98.9 7;
- 98.10 (54) unnamed swamp, Staples, (T.133, R.33, S.1): 3, 4A, 4B, 5, 6, 7;
- 98.11 (55) unnamed swamp, Taconite, (T.56, R.24, S.22): 3, 4A, 4B, 5, 6, 7;
- 98.12 (56) Vadnais Lake, 62-0038-00, (T.30, R.22): 1C, 2Bd, **3C** 3, 4A, 4B, 5, 6;
- 98.13 (57) Wabana Lake, 31-0392-00, (T.57, R.25): 1B, 2A, **3B** 3, 4A, 4B, 5, 6;
- 98.14 (58) Watab Lake, Big, 73-0102-00, (T.124, R.30): 1B, 2A, **3B** 3, 4A, 4B, 5,
98.15 6;
- 98.16 (59) Wilkinson Lake, 62-0043-00, (T.30, R.22): 1C, 2Bd, **3C** 3, 4A, 4B, 5,
98.17 6;
- 98.18 (60) Willard Lake, 11-0564-00, (T.139, R.30W, S.15): 1B, 2A, **3B** 3, 4A,
98.19 4B, 5, 6; and
- 98.20 (61) Yawkey (North Yawkey) Mine Pit, 18-0434-00, (T.46, R.29W, S.1):
98.21 1B, 2A, **3B** 3, 4A, 4B, 5, 6.

98.22 C. Calcareous fens: none currently listed.

98.23 D. Scientific and natural areas:

99.1 (1) *Itasca Wilderness Sanctuary, [11/5/84P] waters within the Itasca
99.2 Wilderness Sanctuary, Clearwater County, (T.143, R.36): 2B, ~~3B~~ 3, 4A, 4B, 5, 6, except
99.3 wetlands, which are 2D, 3, 4A, 4B, 5, 6;

99.4 (2) *Iron Springs Bog, [11/5/84P] waters within the Iron Springs Bog
99.5 Scientific and Natural Area, Clearwater County, (T.144, R.36): 2B, ~~3B~~ 3, 4A, 4B, 5, 6,
99.6 except wetlands, which are 2D, 3, 4A, 4B, 5, 6;

99.7 (3) *Pennington Bog, [11/5/84P] waters within the Pennington Bog Scientific
99.8 and Natural Area, Beltrami County, (T.146, R.30): 2B, ~~3B~~ 3, 4A, 4B, 5, 6, except wetlands,
99.9 which are 2D, 3, 4A, 4B, 5, 6; and

99.10 (4) *Wolsfeld Woods, [11/5/84P] waters within the Wolsfeld Woods Scientific
99.11 and Natural Area, Hennepin County, (T.118, R.23): 2B, ~~3B~~ 3, 4A, 4B, 5, 6, except wetlands,
99.12 which are 2D, 3, 4A, 4B, 5, 6.

99.13 Subp. 5. **Minnesota River basin.** The water-use classifications for the stream reaches
99.14 within each of the major watersheds in the Minnesota River basin listed in item A are found
99.15 in tables entitled "Beneficial Use Designations for Stream Reaches" published on the website
99.16 of the Minnesota Pollution Control Agency at
99.17 www.pca.state.mn.us/regulations/minnesota-rulemaking
99.18 www.pca.state.mn.us/regulations/incorporations-reference. The tables are incorporated by
99.19 reference and are not subject to frequent change. The date after each watershed listed in
99.20 item A is the publication date of the applicable table. The water-use classifications for the
99.21 other listed waters in the Minnesota River basin are as identified in items B to D. See parts
99.22 7050.0425 and 7050.0430 part 7050.0415 for the classifications of waters not listed.
99.23 Designated use information for water bodies can also be accessed through the agency's
99.24 Environmental Data Access (<http://www.pca.state.mn.us/quick-links/eda-surface-water-data>).

99.25 *[For text of item A, see Minnesota Rules]*

- 100.1 B. Lakes:
- 100.2 (1) Amber Lake, 46-0034-00, (T.102, R.30): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 100.3 (2) Bardwell Lake, 46-0023-00, (T.102, R.30): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 100.4 (3) Budd Lake, 46-0030-00, (T.102, R.30): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 100.5 (4) Courthouse Lake, 10-0005-00, (T.115, R.23W, S.9): 1B, 2A, ~~3B~~ 3, 4A,
- 100.6 4B, 5, 6;
- 100.7 (5) George Lake, 46-0024-00, (T.102, R.30): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 100.8 (6) Hall Lake, 46-0031-00, (T.102, R.30): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 100.9 (7) Mud Lake, 46-0035-00, (T.102, R.30): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 100.10 (8) One Hundred Acre Slough, Saint James, (T.106, R.31, S.7): 3, 4A, 4B,
- 100.11 5, 6, 7;
- 100.12 (9) Silver Lake, North, 46-0016-00, (T.101, R.30): 1C, 2Bd, ~~3C~~ 3, 4A, 4B,
- 100.13 5, 6;
- 100.14 (10) Sisseton Lake, 46-0025-00, (T.102, R.30): 1C, 2Bd, ~~3C~~ 3, 4A, 4B, 5, 6;
- 100.15 (11) unnamed marsh, Barry, (T.124, R.47, S.8): 3, 4A, 4B, 5, 6, 7;
- 100.16 (12) unnamed slough, Kensington, (T.127, R.40, S.34): 3, 4A, 4B, 5, 6, 7;
- 100.17 (13) unnamed slough, Brandon, (T.129, R.39, S.21, 22): 3, 4A, 4B, 5, 6, 7;
- 100.18 (14) unnamed swamp, Minnesota Lake, (T.104, R.25, S.3, 4): 3, 4A, 4B, 5,
- 100.19 6, 7;
- 100.20 (15) unnamed swamp (Skauby Lake), 17-0035-00, Storden, (T.107, R.37,
- 100.21 S.30): 3, 4A, 4B, 5, 6, 7;

101.1 (16) unnamed swamp, Sunburg, Sunburg Coop Cry., (T.122, R.36, S.30): 3,

101.2 4A, 4B, 5, 6, 7;

101.3 (17) unnamed swamp, Lowry, (T.126, R.39, S.35, 36): 3, 4A, 4B, 5, 6, 7;

101.4 and

101.5 (18) Wilmert Lake, 46-0014-00, (T.101, R.30): 1C, 2Bd, 3€ 3, 4A, 4B, 5, 6.

101.6 *[For text of item C, see Minnesota Rules]*

101.7 D. Scientific and natural areas: *Blackdog Preserve, [3/7/88P] waters within the

101.8 Blackdog Preserve Scientific and Natural Area, Dakota County (T.27, R.24, S.27, 34): 2B,

101.9 3B 3, 4A, 4B, 5, 6, except wetlands, which are 2D, 3, 4A, 4B, 5, 6.

Subp. 6. **Saint Croix River basin.** The water-use classifications for the stream reaches within each of the major watersheds in the Saint Croix River basin listed in item A are found in tables entitled "Beneficial Use Designations for Stream Reaches" published on the website of the Minnesota Pollution Control Agency at www.pca.state.mn.us/regulations/minnesota-rulemaking www.pca.state.mn.us/regulations/incorporations-reference. The tables are incorporated by reference and are not subject to frequent change. The date after each watershed listed in item A is the publication date of the applicable table. The water-use classifications for the other listed waters in the Saint Croix River basin are as identified in items B to D. See parts 7050.0425 and 7050.0430 part 7050.0415 for the classifications of waters not listed. Designated use information for water bodies can also be accessed through the agency's Environmental Data Access (<http://www.pca.state.mn.us/quick-links/eda-surface-water-data>).

101.22 [For text of item A, see Minnesota Rules]

101.23 B. Lakes:

101.24 (1) *Grindstone Lake, 58-0123-00, [3/7/88R] (T.42, R.21): 1B, 2A, 3B_3,
101.25 4A, 4B, 5, 6; and

102.1 (2) unnamed swamp, Shafer, (T.34, R.19, S.31, 32): 3, 4A, 4B, 5, 6, 7.

102.2 C. Calcareous fens: none currently listed.

102.3 D. Scientific and natural areas:

102.4 (1) *Boot Lake, [11/5/84P] waters within the Boot Lake Scientific and Natural
102.5 Area, Anoka County, (T.33, R.22): 2B, 3B 3, 4A, 4B, 5, 6, except wetlands, which are 2D,
102.6 3, 4A, 4B, 5, 6;

102.7 (2) *Falls Creek, [4/18/94P] (trout designated waters within Washington
102.8 County), (T.32, R.19, S.7; T.32, R.20, S.12): 1B, 2A, 3B 3, 4A, 4B, 5, 6;

102.12 (4) *Kettle River, [11/5/84P] waters within the Kettle River Scientific and
102.13 Natural Area, Pine County, (T.41, R.20): 2B, 3B 3, 4A, 4B, 5, 6.

102.14 Subp. 7. Lower Mississippi River basin (from the confluence with the St. Croix

102.15 **River to the Iowa border).** The water-use classifications for the stream reaches within
102.16 each of the major watersheds in the lower Mississippi River basin from the confluence with
102.17 the Saint Croix River to the Iowa border listed in item A are found in tables entitled
102.18 "Beneficial Use Designations for Stream Reaches" published on the website of the Minnesota
102.19 Pollution Control Agency at www.pca.state.mn.us/regulations/minnesota-rulemaking
102.20 www.pca.state.mn.us/regulations/incorporations-reference. The tables are incorporated by
102.21 reference and are not subject to frequent change. The date after each watershed listed in
102.22 item A is the publication date of the applicable table. The water-use classifications for the
102.23 other listed waters in the lower Mississippi River basin from the confluence with the St.
102.24 Croix River to the Iowa border are as identified in items B to D. See ~~parts 7050.0425 and~~
102.25 ~~7050.0430~~ part 7050.0415 for the classifications of waters not listed. Designated use

103.1 information for water bodies can also be accessed through the agency's Environmental Data
103.2 Access (<http://www.pca.state.mn.us/quick-links/eda-surface-water-data>).

103.3 *[For text of item A, see Minnesota Rules]*

103.4 B. Lakes:

103.5 (1) unnamed marsh, Kilkenny, (T.110, R.23, S.22, 23): 3, 4A, 4B, 5, 6, 7;
103.6 and

103.7 (2) unnamed swamp, Hampton, (T.113, R.18, S.8): 3, 4A, 4B, 5, 6, 7.

103.8 C. Calcareous fens:

103.9 (1) *Cannon River Wilderness Area fen, 18, Rice [3/7/88R] (T.111, R.20,
103.10 S.34): 2D, 3, 4A, 4B, 5, 6;

103.11 (2) *Cannon River Wilderness Area fen, 73, Rice [4/18/94R] (T.111, R.20,
103.12 S.22): 2D, 3, 4A, 4B, 5, 6;

103.13 (3) *High Forest fen, 12, Olmsted [4/18/94R] (T.105, R.14, S.14, 15): 2D,
103.14 3, 4A, 4B, 5, 6;

103.15 (4) *Holden 1 West fen, 3, Goodhue [4/18/94R] (T.110, R.18, S.1): 2D, 3,
103.16 4A, 4B, 5, 6;

103.17 (5) *Houston fen, 62, Houston [4/18/94R] (T.104, R.6, S.26): 2D, 3, 4A, 4B,
103.18 5, 6;

103.19 (6) *Nelson WMA fen, 5, Olmsted [3/7/88R] (T.105, R.15, S.16): 2D, 3, 4A,
103.20 4B, 5, 6;

103.21 (7) *Perched Valley Wetlands fen, 2, Goodhue [3/7/88R] (T.112, R.13, S.8):
103.22 2D, 3, 4A, 4B, 5, 6;

- 104.1 (8) *Red Wing fen, 72, Goodhue [4/18/94R] (T.113, R.15, S.21): 2D; 3, 4A,
104.2 4B, 5, 6 and
104.3 (9) *Wiscoy fen, 58, Winona [3/7/88R] (T.105, R.7, S.15): 2D, 3, 4A, 4B,
104.4 5, 6.

[For text of item D, see Minnesota Rules]

Subp. 8. **Cedar-Des Moines Rivers basin.** The water-use classifications for the stream reaches within each of the major watersheds in the Cedar-Des Moines Rivers basin listed in item A are found in tables entitled "Beneficial Use Designations for Stream Reaches" published on the website of the Minnesota Pollution Control Agency at www.pca.state.mn.us/regulations/minnesota-rulemaking www.pca.state.mn.us/regulations/incorporations-reference. The tables are incorporated by reference and are not subject to frequent change. The date after each watershed listed in item A is the publication date of the applicable table. The water-use classifications for the other listed waters in the Cedar-Des Moines Rivers basin are as identified in items B to D. See parts ~~7050.0425 and 7050.0430~~ part 7050.0415 for the classifications of waters not listed. Designated use information for water bodies can also be accessed through the agency's Environmental Data Access (<http://www.pca.state.mn.us/quick-links/eda-surface-water-data>).

104.18 [For text of items A and B, see Minnesota Rules]

C. Calcareous fens:

- 104.20 (1) *Heron Lake fen, 45, Jackson [3/7/88R] (T.103, R.36, S.29): 2D, 3, 4A,
104.21 4B, 5, 6; and
104.22 (2) *Thompson Prairie fen, 20, Jackson [3/7/88R] (T.103, R.35, S.7): 2D, 3,
104.23 4A, 4B, 5, 6.

105.1 D. Scientific and natural areas: *Prairie Bush Clover, [3/7/88P] waters within the
105.2 Prairie Bush Clover Scientific and Natural Area, Jackson County, (T.103, R.35, S.17): 2B,
105.3 3B, 3, 4A, 4B, 5, 6, except wetlands, which are 2D, 3, 4A, 4B, 5, 6.

105.4 Subp. 9. **Missouri River basin.** The water-use classifications for the stream reaches
105.5 within each of the major watersheds in the Missouri River basin listed in item A are found
105.6 in tables entitled "Beneficial Use Designations for Stream Reaches" published on the website
105.7 of the Minnesota Pollution Control Agency at
105.8 www.pca.state.mn.us/regulations/minnesota-rulemaking
105.9 www.pca.state.mn.us/regulations/incorporations-reference. The tables are incorporated by
105.10 reference and are not subject to frequent change. The date after each watershed listed in
105.11 item A is the publication date of the applicable table. The water-use classifications for the
105.12 other listed waters in the Missouri River basin are as identified in items B to D. See ~~parts~~
105.13 ~~7050.0425 and 7050.0430 part 7050.0415~~ for the classifications of waters not listed.
105.14 Designated use information for water bodies can also be accessed through the agency's
105.15 Environmental Data Access (<http://www.pca.state.mn.us/quick-links/eda-surface-water-data>).

105.16 *[For text of items A and B, see Minnesota Rules]*

105.17 C. Calcareous fens:

- 105.18 (1) *Burke WMA fen, 57, Pipestone [11/12/90R] (T.106, R.44, S.28): 2D,
105.19 3, 4A, 4B, 5, 6;
- 105.20 (2) *Hole-in-the-Mountain Prairie fen, 6, Pipestone [11/12/90R] (T.108,
105.21 R.46, S.1; T.109, R.45, S.31): 2D, 3, 4A, 4B, 5, 6;
- 105.22 (3) *Lost Timber Prairie fen, 13, Murray [4/18/94R] (T.105, R.43, S.2): 2D,
105.23 3, 4A, 4B, 5, 6; and
- 105.24 (4) *Westside fen, 59, Nobles [11/12/90R] (T.102, R.43, S.11): 2D, 3, 4A,
105.25 4B, 5, 6.

106.1 *[For text of item D, see Minnesota Rules]*

106.2 **7053.0135 GENERAL DEFINITIONS.**

106.3 *[For text of subparts 1 to 4, see Minnesota Rules]*

106.4 Subp. 4a. **122-day ten-year low flow or 122Q₁₀**. "122-day ten-year low flow" or
106.5 "122Q₁₀" means the lowest average 122-day flow with a once-in-ten-year recurrence interval.
106.6 A 122Q₁₀ is derived using the same methods used to derive a 7Q₁₀, and the guidelines
106.7 regarding period of record for flow data and estimating a 7Q₁₀ apply equally to determining
106.8 a 122Q₁₀, as described in subpart 3.

106.9 *[For text of subpart 5, see Minnesota Rules]*

106.10 Subp. 5a. **Control document**. "Control document" has the meaning given in part
106.11 7050.0255, subpart 10.

106.12 *[For text of subparts 6 to 10, see Minnesota Rules]*

106.13 **7053.0205 GENERAL REQUIREMENTS FOR DISCHARGES TO WATERS OF**
106.14 **THE STATE.**

106.15 *[For text of subparts 1 to 6, see Minnesota Rules]*

106.16 Subp. 7. **Minimum stream flow.**

106.17 A. Except as provided in items B and C to E, discharges of sewage, industrial
106.18 waste, or other wastes must be controlled so that the water quality standards are maintained
106.19 at all stream flows that are equal to or greater than the 7Q₁₀ for the critical month or months.

106.20 *[For text of items B and C, see Minnesota Rules]*

106.21 D. Discharges of sewage, industrial waste, or other wastes must be controlled at
106.22 the point where water is withdrawn for irrigation, so that the irrigation water quality standards
106.23 in part 7050.0224, subpart 2, are maintained at all stream flows that are equal to or greater
106.24 than the 122Q₁₀ calculated from flows during the growing season (June through September).

107.1 E. Discharges of sewage, industrial waste, or other wastes must be controlled at
107.2 the point where water is withdrawn for industrial consumption, so that the industrial water
107.3 quality standard in part 7050.0223, subpart 2, is maintained at all flows at or above the
107.4 specified low flows considered under Minnesota Statutes, section 103G.285, subdivision
107.5 2, for consumptive appropriations.

107.6 D. F. Allowance must not be made in the design of treatment works for low stream
107.7 flow augmentation unless the flow augmentation of minimum flow is dependable and
107.8 controlled under applicable laws or regulations.

107.9 *[For text of subparts 8 to 13, see Minnesota Rules]*

107.10 **7053.0255 PHOSPHORUS EFFLUENT LIMITS FOR POINT SOURCE**
107.11 **DISCHARGES OF SEWAGE, INDUSTRIAL, AND OTHER WASTES.**

107.12 *[For text of subpart 1, see Minnesota Rules]*

107.13 **Subp. 2. Definitions.** For the purposes of this part, the following definitions apply.

107.14 Other relevant definitions are found in part 7050.0150, subpart 4.

107.15 A. "~~122-day ten-year low flow" or "122Q₁₀" means the lowest average 122-day~~
107.16 flow with a once in ten-year recurrence interval. A 122Q₁₀ is derived using the same methods
107.17 used to derive a 7Q₁₀, and the guidelines regarding period of record for flow data and
107.18 estimating a 7Q₁₀ apply equally to determining a 122Q₁₀ as described in part 7053.0135,
107.19 subpart 3.

107.20 B. A. "Affects" means a measurable increase in the adverse effects of phosphorus
107.21 loading as determined by monitoring or modeling, including, but not limited to, an increase
107.22 in chlorophyll-a concentrations, a decrease in water transparency, or an increase in the
107.23 frequency or duration of nuisance algae blooms, from an individual point source discharge.

107.24 C. B. "Expanded discharge" means a disposal system that after May 1, 2008,
107.25 discharges more than 1,800 pounds of total phosphorus per year to a surface water on an

108.1 annual average basis, and increases in wastewater treatment capacity as indicated by an
108.2 increase in the:

- 108.3 (1) design average wet weather flow for the wettest 30-day period for point
108.4 source dischargers of sewage with a continuous discharge, typically a mechanical facility;
- 108.5 (2) design average wet weather flow for the wettest 180-day period for point
108.6 source dischargers of sewage with a controlled discharge, typically a pond facility; or
- 108.7 (3) design average daily flow rate for dischargers of industrial or other wastes.

108.8 **D. C.** "Lake" means an enclosed basin filled or partially filled with standing fresh
108.9 water with a maximum depth greater than 15 feet. Lakes may have no inlet or outlet, an
108.10 inlet or outlet, or both an inlet and outlet.

108.11 **E. D.** "Measurable increase" or "measurable impact" means a change in trophic
108.12 status that can be discerned above the normal variability in water quality data using a weight
108.13 of evidence approach. The change in trophic status does not require a demonstration of
108.14 statistical significance to be considered measurable. Mathematical models may be used as
108.15 a tool in the data analysis to help predict changes in trophic status.

108.16 **F. E.** "New discharge" means a discharge that was not in existence before May
108.17 1, 2008, and discharges more than 1,800 pounds of total phosphorus per year.

108.18 **G. F.** "Reservoir" means a body of water in a natural or artificial basin or water
108.19 course where the outlet or flow is artificially controlled by a structure such as a dam.
108.20 Reservoirs are distinguished from river systems by having a hydraulic residence time of at
108.21 least 14 days. For purposes of this item, residence time is determined using a flow equal to
108.22 the 122Q₁₀ for the months of June through September, a 122Q₁₀ for the summer months.
108.23 "122Q₁₀" has the meaning given in part 7053.0135, subpart 4b.

108.24 **H. G.** "Shallow lake" means an enclosed basin filled or partially filled with standing
108.25 fresh water with a maximum depth of 15 feet or less or with 80 percent or more of the lake

109.1 area shallow enough to support emergent and submerged rooted aquatic plants (the littoral
109.2 zone). It is uncommon for shallow lakes to thermally stratify during the summer. The quality
109.3 of shallow lakes will permit the propagation and maintenance of a healthy indigenous aquatic
109.4 community, and they the shallow lakes will be suitable for boating and other forms of aquatic
109.5 recreation for which they may be usable. For purposes of this chapter, shallow lakes will
109.6 be differentiated from wetlands and lakes on a case-by-case basis. ~~Wetlands are defined~~
109.7 For purposes of this item, "wetlands" has the meaning given in part 7050.0186, subpart 1a.

109.8 [For text of subparts 3 to 6, see Minnesota Rules]

109.9 **7053.0260 EFFLUENT LIMITS FOR POINT SOURCE DISCHARGES OF SEWAGE,**
109.10 **INDUSTRIAL, AND OTHER WASTES TO PROTECT INDUSTRIAL**
109.11 **CONSUMPTION.**

109.12 Subpart 1. Scope. The effluent limits in this part are in addition to the effluent limits
109.13 specified elsewhere in this chapter. In the event of a conflict between this part and other
109.14 applicable regulations, the more stringent requirement applies.

109.15 Subp. 2. Definitions. Definitions in parts 7050.0150, subpart 4, and 7053.0135 apply
109.16 to this part.

109.17 Subp. 3. Developing effluent limits to protect industrial consumption.

109.18 A. The commissioner must use the procedures in Class 3 Translator Method,
109.19 which is incorporated by reference in item D, to determine whether a discharger would
109.20 cause or contribute to an impairment of the class 3 industrial consumption water quality
109.21 standard.

109.22 B. Water-quality-based effluent limits must protect water quality at the point at
109.23 which water is withdrawn for industrial consumption at all flows at or above the specified
109.24 low flows considered under Minnesota Statutes, section 103G.285, subdivision 2, for
109.25 consumptive appropriations.

110.1 C. When the commissioner determines, using the procedures incorporated in item
110.2 D, that a discharger requires a water-quality-based effluent limit to protect water used for
110.3 industrial consumption, the commissioner must include an effluent limit in the discharger's
110.4 control document.

110.5 D. Class 3 Translator Method, Minnesota Pollution Control Agency (2020 and
110.6 as subsequently amended), is incorporated by reference. The document is not subject to
110.7 frequent change and is available at www.pca.state.mn.us/regulations/incorporations-reference.

110.8 **7053.0263 EFFLUENT LIMITS FOR POINT SOURCE DISCHARGES OF SEWAGE,**
110.9 **INDUSTRIAL, AND OTHER WASTES TO PROTECT WATER QUALITY FOR**
110.10 **IRRIGATION.**

110.11 Subpart 1. Scope. The effluent limits in this part are in addition to the effluent limits
110.12 specified elsewhere in this chapter. In the event of a conflict between this part and other
110.13 applicable regulations, the more stringent requirement applies.

110.14 Subp. 2. Definitions. Definitions in parts 7050.0150, subpart 4, and 7053.0135 apply
110.15 to this part.

110.16 Subp. 3. Developing effluent limits to protect irrigation water quality.

110.17 A. The commissioner must use the procedures in Class 4A Translator Method,
110.18 which is incorporated by reference in item D, to determine whether a discharger would
110.19 cause or contribute to an impairment of the class 4A irrigation water quality, except for
110.20 when protecting wild rice.

110.21 B. Water-quality-based effluent limits must protect water quality at the point at
110.22 which water is withdrawn for irrigation at all flows at or above the 122Q₁₀ critical low flow.

110.23 C. When the commissioner determines, using the procedures incorporated in item
110.24 D, that a discharger requires a water-quality-based effluent limit to protect irrigation water
110.25 quality, the commissioner must include an effluent limit in the discharger's control document.

111.1 D. Class 4A Translator Method, Minnesota Pollution Control Agency (2020 and
111.2 as subsequently amended), is incorporated by reference. The document is not subject to
111.3 frequent change and is available at www.pca.state.mn.us/regulations/incorporations-reference.

111.4 **7053.0265 DISCHARGE RESTRICTIONS APPLICABLE TO MISSISSIPPI RIVER**
111.5 **FROM RUM RIVER TO ST. ANTHONY FALLS.**

111.6 Subpart 1. **Scope and beneficial uses.** The restrictions on discharges specified in this
111.7 part are applicable to that portion of the Mississippi River from, but not including, the mouth
111.8 of the Rum River to the upper lock and dam at St. Anthony Falls, approximately at the
111.9 northeastward extension of Fifth Avenue South in the city of Minneapolis, and tributary
111.10 streams. The primary use of these waters is as a source of public water supply for drinking,
111.11 food processing, and related purposes. Other uses applicable to these waters are defined in
111.12 parts 7050.0410, 7050.0430, 7050.0415 and 7050.0470, subpart 4.

111.13 [For text of subparts 2 and 3, see Minnesota Rules]

111.14 **REPEALER.** Minnesota Rules, parts 7050.0223, subparts 3, 4, 5, and 6; 7050.0224, subpart
111.15 4; 7050.0410; 7050.0425; 7050.0430; and 7050.0450, are repealed.